

1836

1913

IRON AGE

FARM AND GARDEN IMPLEMENTS

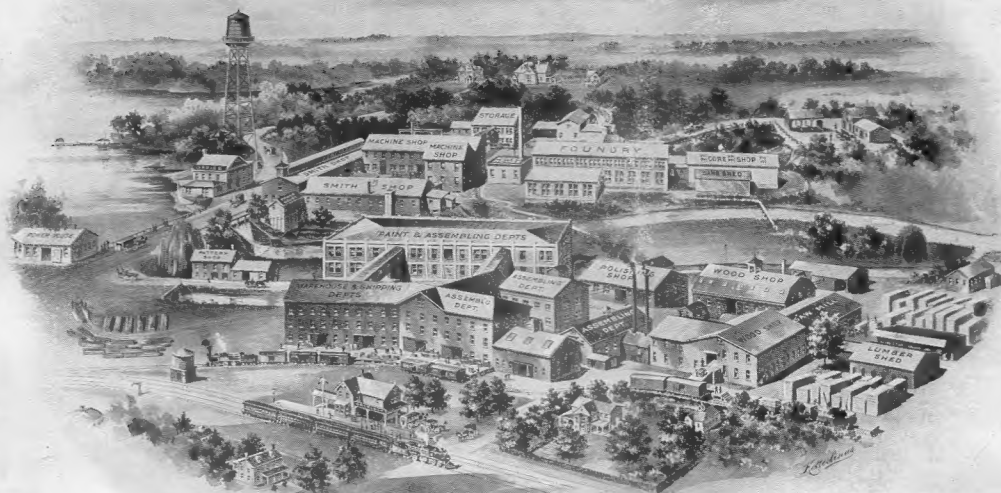
BATEMAN M'FG CO.,
Grenloch, New Jersey,
U. S. A.



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Bateman Mfg. Co.

IRON AGE

Factory and Home Office



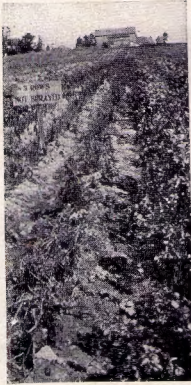
BATEMAN MANUFACTURING CO.
GRENLOCH, NEW JERSEY,
U. S. A.



Big crop dug by E. E. Madara, Palermo, N. J., with *IRON AGE* No. 150 Digger

5.00
IRON AGE

MACHINES ARE NECESSARY



What would this man's crop have been without a Sprayer?



Picking up potatoes after an Iron Age Digger. How many men, digging by hand, would be needed to keep this crowd busy?



Mile-long rows. What would he do without tools?

TO compete with his neighbor, an up-to-date farmer or gardener must have the right kind of machines. Thoroughness is an essential in raising good crops—"early, often and right" are the words to be remembered in connection with most operations. The soil must be loose, and mellow as possible, rows straight, seed planted perfectly and fertilized properly, soil kept fine, loose and sweet by cultivating constantly, spraying five or six times to insure your crop and harvesting "right" in order to save it all. How are you going to do all of this work without the best modern machines obtainable? Can't be done—you would need a small army of men or you never would get around—some necessary work would have to be skimmed or missed entirely, and the work would not be done as well. Thoroughness also means some careful study on your part to see what machines you need to do your work and then know that you are getting the right kind. Don't decide off-hand. We cheerfully invite investigation—we have the goods that will not suffer by comparison. **Iron Age** machines are not built merely to sell, but to stay sold and have you come again for others in the line. We look after the little details that make a perfect working, smooth running machine, in field and garden. Each customer gets prompt, careful service and that fair consideration for his wishes, for which **Iron Age** people always stand. We are providing more manufacturing room with a new four story paint and assembling room, and additions and improvements to other departments—so we can take care of you better than ever before. We ask your attention to the following pages, confident that you will be sufficiently interested to write us at once about your needs.

BATEMAN MFG. CO.

GRENLOCH, NEW JERSEY, U. S. A.

Complete stocks of machines, attachments
and repairs carried at centers of distribution.

IRON AGE

Catalog Index, Weights and Price List

Weights and Prices are Given for Illustrated Implements Only

Garden Tools

	Page	Packed Weight Lbs.	Price
No. 1 Double and Single Wheel Hoe	6	40	\$ 7.00
No. 4 Comb. Wheel Hoe and Seeder	11	55	11.00
No. 6 Comb. Wheel Hoe and Seeder	4	57	12.00
No. 8 Hill and Drill Seeder	16	40	11.00
No. 9 Single Wheel Hoe	18	28	5.25
No. 11 Wheel Plow	18	15	2.50
No. 12 Wheel Plow and Cultivator	19	20	3.50
No. 15 Comb. Wheel Hoe and Seeder	12	45	11.00
No. 17 Comb. Wheel Hoe and Seeder	13	45	10.00
No. 19 Wheel Plow and Cultivator	19	22	3.25
No. 20 Single Wheel Hoe	12	28	6.00
No. 22 Comb. Fertilizer Distributor and Seeder	15	65	18.00
No. 23 Comb. Fertilizer Distributor, as Side Dresser only	15	40	13.00
No. 25 Fertilizer Distributor	14	28	8.00
No. 26 Fertilizer Drill	14	40	8.50
"New Model" Seed Drill	17	50	8.00
"Advance" Fertilizer Drill	16	46	6.75
"Gem" Single Wheel Hoe	20	25	5.00
"Gem" Double Wheel Hoe	20	30	6.00
Attachments	8		

Horse Hoes, Cultivators and Harrows

No. 1 Cultivator, plain, Fig. 10	26	50	3.15
No. 1 Cultivator, 7 tooth, Fig. 57	26	73	5.20
No. 1 Comb. Harrow and Cultivator, with plain wheel and lever expander	28	66	5.00
No. 5 Orchard Cultivator, Fig. 70	25	80	7.25
No. 6 Horse Hoe and Cultivator, Fig. 160	21	83	6.25
No. 6 Horse Hoe and Cultivator, with plain wheel and lever expander, Fig. 100	22	78	5.75
No. 6 Horse Hoe and Cultivator, with plain wheel and lever expander, Fig. 102	22	70	5.00
No. 6 Cultivator with Furrow-Closing attachment, Fig. 71	22	76	6.75
No. 7 Horse Hoe and Cultivator, Fig. 161	24	80	7.25
No. 8 Horse Hoe and Cultivator, Fig. 157	25	81	7.25
No. 35 Beet Hoe and Cultivator, Fig. 148	27	70	6.75
No. 36 Horse Hoe and Cultivator, Fig. 162	26	65	4.90
No. 37 Cultivator, plain, Fig. 163	27	43	2.85
No. 38 Beet Hoe and Harrow	28	82	6.50
Attachments	22		

Riding and Walking Cultivators

No. 50 Fixed Low Wheel, Riding	36	385	30.00
No. 53 Fixed High Wheel, Riding	37	395	31.50
No. 60 Pivot Wheel, Riding	34	460	34.00
No. 82 Pivot Wheel, Riding	30	450	32.00
No. 83 Pivot Wheel, Riding, Fig. 287	31	440	31.00
No. 84 Pivot Wheel, Riding, Fig. 288	31	425	30.00
No. 86 Pivot Wheel, Riding, Fig. 289	31	445	31.00
No. 97 Walking	40	265	20.00
No. 98 Walking, Fig. 268	40	275	21.00
No. 130 Fixed Wheel, Riding	38	450	30.00
No. 140 Pivot Wheel, Double Row, Riding	39	625	50.00
Attachments	32		
Points and Steels			Inside Back Cover

Orchard and Beet Cultivators

	Page	Packed Weight Lbs.	Price
No. 47 Beet Cultivator	66	145	\$18.00
Attachments	66		
No. 110 Orchard and Variety Cultivator	65	465	32.00
No. 112 Orchard Cultivator, with Extension	64	540	40.00

Potato Planters

No. 1 with Fertilizer Attachment	42	740	80.00
No. 2 without Fertilizer Attachment	42	670	70.00
Attachments	45		

Sprayers

No. 102 Four Row	48	760	70.00
No. 105D Four Row	50	850	92.00
Six-Row Attachment	51	81	15.00
Comb. Pole and Thills	51		6.00
Other attachments	51		

Potato Diggers

No. 120 Low Down	55	1050	90.00
No. 121 Elevator Attachment	56	265	15.00
No. 122 Comb. Low Down and Elevator	56	1335	105.00
No. 124 Elevator Digger	56	1245	100.00
No. 150 Elevator Digger	59	750	75.00
No. 150S Elevator Digger	61	742	75.00
Attachments	57		

Rakes

No. 1 8 ft. 20 teeth	62	299	25.00
No. 2 8 ft. 20 teeth	62	315	25.00
No. 1 8 ft. 26 teeth	62	310	26.00
No. 2 8 ft. 26 teeth	62	326	26.00
No. 1 9 ft. 22 teeth	62	314	26.00
No. 2 9 ft. 22 teeth	62	334	26.00
No. 1 9 ft. 27 teeth	62	324	27.00
No. 2 9 ft. 27 teeth	62	344	27.00
No. 1 10 ft. 24 teeth	62	326	27.00
No. 2 10 ft. 24 teeth	62	347	27.00
No. 1 10 ft. 31 teeth	62	333	28.00
No. 2 10 ft. 31 teeth	62	354	28.00

Variety Machines

No. 90 As a Row Maker	67	360	44.00
No. 90 With Seeding attachment	67	390	50.50
No. 90 Complete, with Marker, Fig. 346	67-68	450	58.00
No. 91 Asparagus Ridger	69	305	29.00
No. 92 As a Marker only	68	350	27.50
No. 145 Asparagus Ridger and Leveller	69	358	40.00

Miscellaneous

Barrel Truck with Barrel, Steel Wheels, 2 1/4-inch tire	70	150	10.75
Hand Cart, Leaf Rack and other attachments	70		
Small Farm and Garden Tools	71		
Row Index	72		
Harness Brackets, per set	72		1 00

IRON AGE

Advantages of Wheel Hoes



WHO SHOULD USE THEM AND WHY

THE market gardener on a large or small scale,
The small fruit farmer,
The large grain and hay farmer, who cannot spare time to make garden in the new way, nor
horses to work it in the old way,
The woman on the farm who has to make her own garden or buy fresh vegetables,
The poultryman who should keep his chicken yard stirred up,
The mechanic or laborer in town, who has a small garden in which he saves a considerable
portion of his income,
The man in town or suburban district, who wants the best of everything on his table, and takes
great pleasure and pride in his garden,—
All these will find the wheel hoe necessary and profitable.

A WHEEL HOE, when adjusted to the work you want it to do, needs only to be guided and thrust
ahead, a step at a time—your body is always upright and never at a backaching bend
—the wheel hoe is always steady and works close to the plants without injuring them.

When you use a Wheel Hoe, you can lay out your garden in long rows, the modern way, and allow
just enough space between rows so that plants will have room to grow fully—you can
vary the width of your rows at any point where the crop needs more room—you save
ground as you can plant two or three rows where you had one before.

With a Wheel Hoe, you can go where a horse cannot—you can do the work about as quickly and
with greater facility, as you can change easily from narrow to wide rows, turn quickly
at the ends and save your crop from heavy clods that would be thrown by larger
tools and horse's heels.

With a Wheel Hoe, you can go over your ground many times and do the work each time much
quicker, better, safer, than with the old-fashioned hoe—the soil can be kept cultivated
thoroughly and the weeds don't have a chance to grow.

With a Wheel Hoe, you can have the necessary tools to hoe, cultivate, rake, level your ground,
weed thoroughly, plow, open furrows and cover them, hill growing plants and so forth.

Please turn to the next pages where we explain more fully what **Iron Age** Wheel Hoes and Drills
can do for you.

No. 6 Combined Double and Single Wheel Hoe, Hill and Drill Seeder

Price, No. 6, Fig. 114 - \$12.00

Packed weight, 57 lbs.

Price, No. 14, with Hoes and
Teeth only - - 10.50

Price, No. 7, Hill and Drill
Seeder only - - 9.00

See pages 10 and 11



A
complete
equipment
for
every
gardener

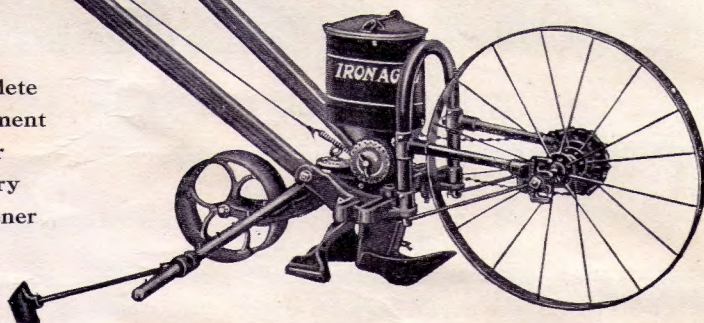


Fig. 114. Includes tools for Wheel Hoes. Three machines in one



As Double Wheel Hoes astride the rows in a typical market garden. Cultivate all the ground and close to the plants



As a Drill, sowing in straight, continuous rows and marking the next one. Opens its own furrow



As a Single Wheel Hoe, in large private garden. Could not have been worked without a tool of this kind

IRON AGE

Advantages of Combination Tools



As Single Wheel Weeder. How much of it would he do in the old way?



Ready for her garden. Only one form of the No. 6 (See page 6 for others)



This small boy, with his complete No. 6 outfit, did all the work

IT will be apparent to any man who stops to think about it that a tool capable of being converted into two or more uses, increases in value in proportion to the number of changes that can be made and the worth of the work done. Combination tools save in first cost and you don't have to keep two or more tools around. You don't have to take one tool back to the house and get another to complete your work—make your changes on the spot. You don't have to keep two frames in repair—one **Iron Age** frame will last for all the combinations they have to carry. You can hill seed, drill seed, sow fertilizer, hoe, cultivate, rake, plow, weed, level—you can work astride the rows or between them. You can take care of the many different crops from start to finish—and all this with one combined machine. **Iron Age** Garden Tools have a greater variety of combination and more labor saving, crop saving attachments than any similar line manufactured. The various changes are easily made, the attachments are all adjusted in a simple fashion and they cost little for repairs. Best of all, we can furnish each of these tools as a complete machine, if you prefer to use them that way. You can buy the simplest form now and add the attachments as you need them, and you will not have to pay more because you buy them separately. You buy just what you want, as you want it.

THE IRON AGE

No. 6 Combined

Double and Single Wheel Hoe, Hill and Drill Seeder

can be made into the following combinations, and will be furnished complete in any one of them.

- No. 1. Double and Single Wheel Hoe with Hoes, Cultivator Teeth, Plows and Rakes.
- No. 3. Double and Single Wheel Hoe with Side Hoes only.
- No. 13. Double and Single Wheel Hoe with Side Hoes and Teeth only.
- No. 6. Complete with all tools.
- No. 7. Hill and Drill Seeder only.
- No. 14. Hill and Drill Seeder with Side Hoes and Teeth only.

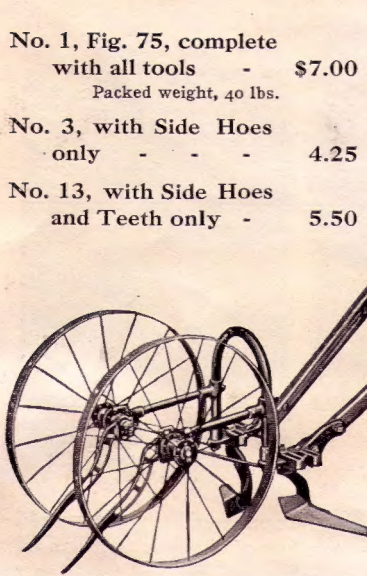
IRON AGE

No. 1 Double and Single Wheel Hoe

No. 1, Fig. 75, complete
with all tools - \$7.00
Packed weight, 40 lbs.

No. 3, with Side Hoes
only - - - 4.25

No. 13, with Side Hoes
and Teeth only - 5.50



With Side Hoes only

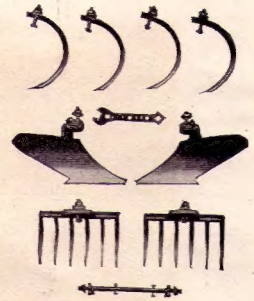


Fig. 75, complete with all tools

A complete equip-
ment for every gardener

Takes Fig. 134 drill
attachment, page 10,
to make complete
No. 6

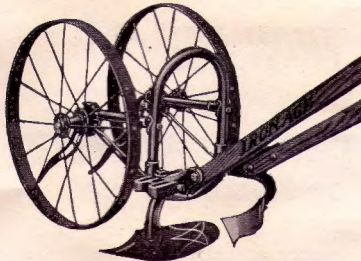


Fig. 311
With Plows set for hilling

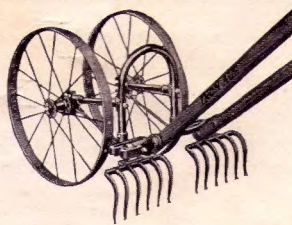


Fig. 310
With Rakes to go astride the row

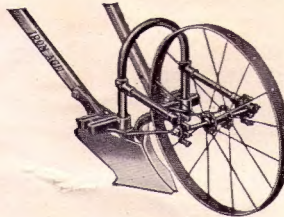


Fig. 313
Set to open a furrow

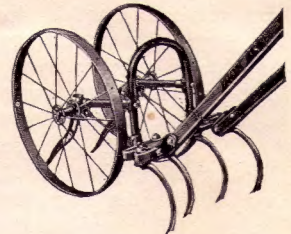


Fig. 312
With cultivator teeth which can
be set to suit the width rows

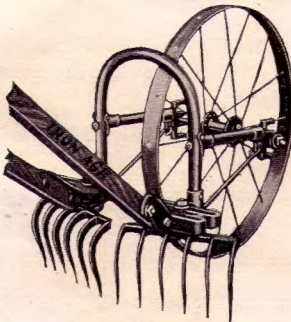


Fig. 314
Set for weeding between the rows

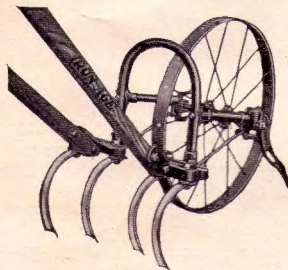


Fig. 315
For cultivation between rows

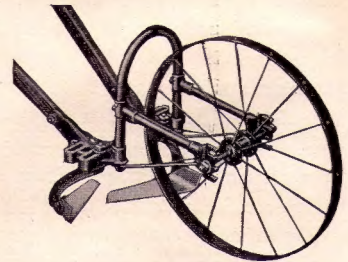


Fig. 76
Single Wheel Hoe form of No. 1

IRON AGE

No. 1 Double and Single Wheel Hoe—Continued



His eyes on the wheels

plants. The wheels can be set at three different heights in the frame without entirely removing the axle nuts and both wheels can be placed inside of the frame for working in narrow spaces. *The Iron Age is the only wheel hoe built to take two wheels or one.* An extra axle is sent out with each tool to be used as in Figs. 76, 313, 314, 315, on page 6, making a perfect Single Wheel Hoe. The latter is better in all garden work except where it is necessary or desirable to work astride the rows.

The Handles are made of the best ash and can be set in height to suit a small boy or a tall man. In Fig. 182, note slots in handle sockets.

Two Vine Lifters go with each tool—they prevent leaves and vines being covered with soil thrown by plow or hoes. Can be set high or low by loosening a nut on each side or they can be taken off when not needed.

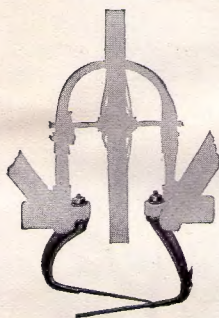


Fig. 316

Hoes set close for working between narrow rows.
Furnished in widths from 4 inches up

accomplish in thrice the time—your work will be more thorough—you can hoe without damage to the plants—you can hoe several times and still be ahead—your crop comes faster and you get to

WHEEL HOES are, first of all, just what the word "hoe" means—that is, they should be used like one and not pulled or pushed through the ground without stopping to see the effect. You should thrust the tool ahead, a step at a time. The wheels and the tools will have the same relation to each other according as you adjust them—so you will always know what the tools are going to do and need only to keep your eyes on the wheels.

High Wheels run more easily and carry the frame above the work. Iron Age wheels are 16 inches in diameter—made after the fashion of a bicycle wheel—all steel, very light, strong and steady.

Fig. 182 shows more bicycle construction—a steel tube frame with malleable castings fitted closely and securely—a combination that makes breakage practically impossible and is compact and light. The arch is high so that you can work astride 20-inch

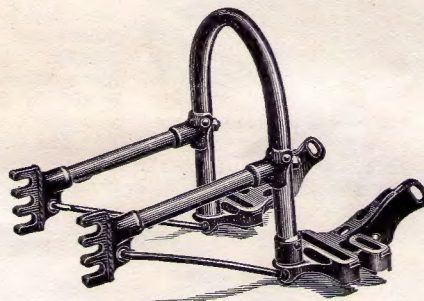


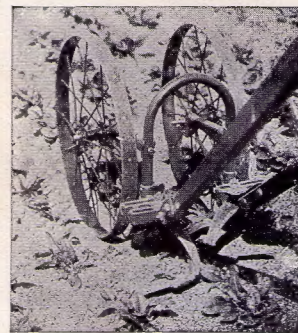
Fig. 182

Showing steel tube frame, slots for wheel adjustment and for handles and tools

The working tools for No. 1 complete, include a pair each of side hoes, plows and rakes, and four cultivator teeth.

Side Hoes do a large part of the work. For first hoeings of small plants, they are adjusted as in Fig. 75, working astride, or, as in Fig. 76, working between the rows. One hoe hangs slightly ahead of the other—you have only to watch the one ahead—there is more room for trash to slip through, and when hoes are reversed they can overlap, and you can hoe in a nine-inch space if you need to. The side hoes can be set very close to the plants as the wheel runs steady. Hoes can be furnished to set alike, opposite each other, if preferred and specified that way. The standard hoe is seven inches wide but we can furnish them from four to twelve inches to suit your needs, if you will so order.

In spinach, where the rows are from eight to fourteen inches apart, use the width hoe that works a little over half the space. Astride the rows, for the youngest plants, you can do more good work with this wheel hoe than three men could



Short Side Hoes set for close work in spinach

No. 1 Double and Single Wheel Hoe—Continued



Rear view of teeth in scullions

market quicker. A suggestion. Put full width side hoes on the single wheel hoe and cut your spinach two rows at a time. Don't break your back doing the work by hand with a knife—our way is quicker and better.

Cultivator Teeth are made of one piece of steel—slender, yet strong—just right for deep cultivation. They can be used as needed in any position on the frame. **Fig. 317** shows side and front views of new special teeth having the shank closed in and sweep-like points one inch wide. They cut the surface better without taking more force behind them. These teeth will fit old machines and new tools can be equipped with them when you so specify.

The Plows are used astride the rows or between—hilling the crop or throwing the soil from the plants—with both plows together in the center, open a good furrow—by reversing them, cover after manure and seed.

Rakes level and pulverize the soil for the seed bed—also, break the first crust, destroying the weeds. They can be used astride the rows or between, close together—can be used in either slot but if you want to rake deeper, place them in the rear.

The rakes can be set at any angle and when so set, trash and weeds are more easily pushed aside.

Attachments

All attachments shown on this and the following page can be used with No. 1 Double or Single

Fig. 317
Front and side views of special narrow shank cultivator teeth.
Price, per set of four, \$. 80

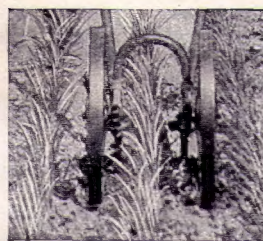
Wheel Hoes. This increases the variety of work and adds that much to the value of the tool—it is not necessary to purchase separate complete tools to do the various kinds of work which these attachments are made for. They save many hours of labor, as well. **Iron Age** Wheel Hoes have a greater number and variety of practical attachments than any other wheel hoe manufactured.

Combined Disc and Fender Attachment, Fig. 169



Showing discs cutting ground each side of the row

A very popular and valuable addition to this Wheel Hoe. When small plants are held in the crust that forms around them, it is almost impossible to hoe close, without displacing them. To avoid this we use small discs in connection with the side hoes—they are set to cut the surface in advance of the hoes. The discs may be used as fenders, usually with the cultivator teeth—the fenders prevent damage to the young plants from soil thrown up by the teeth. Arrows indicate three different adjustments—for height or width, and forward or back.



Cultivating onions astride the row



Leveling and pulverizing

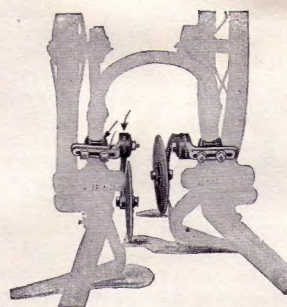


Fig. 169

Solid part shows disc and fender attachment. Arrows indicate adjustments. Price, attachment only, \$1.10

IRON AGE

Attachments for Wheel Hoes

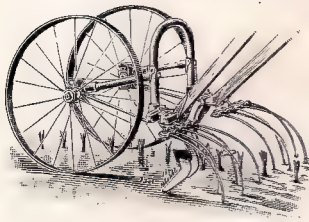


Fig. 81
Double Weeder attachment
Price per pair, \$1.10

Landside Plow, Fig. 82

Converts the tool into a perfect Wheel Plow—the landside plow follows the line of the wheel. It is easily attached, plows deep, throws a strong furrow and runs steady. Can be used with two wheels but is more manageable with one wheel.

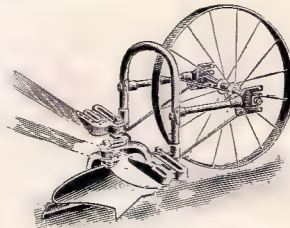


Fig. 82
The Landside Plow attachment
Price, \$.90

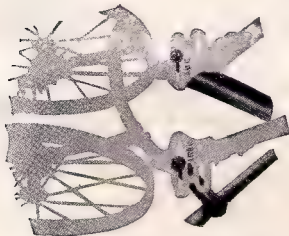


Fig. 236
Hilling attachment for Double
Wheel Hoes. Price, \$1.25

Single Tooth Attachment, Fig. 112

When using the Double Wheel Hoe with the cultivator teeth, a wider space is left between the two inside teeth than between the others, to pass each side of the plants. When using the same combination as a Single Wheel Hoe, this wider space can be divided or equalized with the others by adding an extra tooth and connection, as shown in the cut. Then all the ground will be more thoroughly cultivated.

Onion Set Gatherer, Fig. 33

Saves hours of hard work. Gathers onions, radishes and other root crops in a thorough manner. Can be used on any of our Double and Single Wheel Hoes.

Either No. 25 Fertilizer Distributor or No. 26 Drill Attachments, shown on page 14, can be applied to No. 1 Double and Single Wheel Hoe, making in each case complete tools in themselves.

Double Weeder Attachment, Fig. 81

To be fastened in rear slot of the frame. As it follows the side hoes, it finishes the young weeds in the hard crust—the hoes might not do it alone. The side hoes are made with very little pitch and the weeder throws back to the plants, what little soil is turned away and leaves the ground perfectly level, with a mulch of fine soil that protects in time of drought. As shown in the cut—is on Double Wheel Hoe, but can be used on Single Wheel Hoe between the rows by changing to opposite sides. The width can be reduced, if necessary, by removing one or more teeth.

Double Moldboard Plow, Fig. 170

Has adjustable wings to open furrows of various widths. For narrow work the wings can be removed. Can be applied to any Iron Age Wheel Hoe.

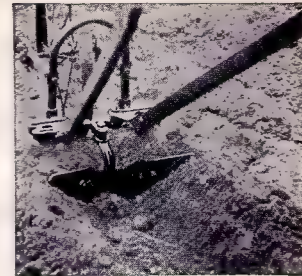


Fig. 170
Double Moldboard Plow attachment
Price with bracket, \$1.40

Hilling Attachment, Fig. 236

For Double Wheel Hoes. These hillers draw a small amount of soil to the plants, working astride the row. Are used principally in early cultivation of onions.



Fig. 216
Special Fender Side Hoes
Price, \$1.40

Special Fender Side Hoes, Fig. 216

They are made with high sides that act as fenders and are for early working of crops, especially onions. They may be reversed from position shown in the cut, if desired. Can be used on any of the wheel hoes and will be furnished in place of the regular side hoes when ordered that way. Add letter C to the number in such a case, as No. 1 C. The list price would be increased 65 cents.



Fig. 112
Single Tooth attachment
Price, \$.60



Fig. 33
Onion Set
Gatherer
Price, \$.80

No. 6 Combined Double and Single Wheel Hoe, Hill and Drill Seeder

The Making of No. 6 Combined

WHEN No. 6 Hill and Drill attachment is put on the No. 1 Wheel Hoe, the No. 6 Combined Hill and Drill Seeder is the result. This is not a makeshift combination but a thoroughly practical and perfect working drill. We retain in the drill every advantage which the Double and Single Wheel Hoes have and add the one attachment that makes three separate tools in one.

A Double Wheel Hoe

A Single Wheel Hoe

A Hill and Drill Seeder

with all of the various working tools that permit of a large number of adjustments to do any kind of work in the garden or on the truck farm. The change from Drill to Wheel Hoe is easily made in three minutes.

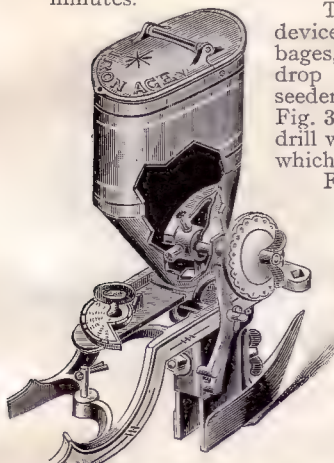


Fig. 146

Showing brush agitator, hill dropping device, index and opening plow

slightest way, wear a long time and are cheaply replaced. Brush agitators separate such seeds as beets and tomatoes that naturally cling together. They will also distribute uniformly small or large quantities of seeds, that is, a hopper full (it holds two quarts) or any portion of it.

Fig. 183 shows the view which the operator has of the drill and the seed dropping as he pushes it forward. There is no mistake about its being actually deposited in the soil, for the operation is always in plain sight. The flow of seed can be stopped, instantly with a swing cut-off, the bottom side of which is shown in Fig. 319. It is conveniently operated by a cord and ring on the handle and prevents loss at ends of rows. The swing cut-off cannot be jammed by falling seed as can those that slide under.

An opening plow crushes and separates all trash in the way and keeps the seed in a



Fig. 134

No. 6 Hill and Drill attachment
Price, \$5.00

The No. 6 Drill attachment is not only a Drill but has a hill-dropping device. Celery, radishes, lettuce, beets, onions, carrots, spinach, chickory, cabbages, peas, etc., can be sown in continuous rows with this drill. Or, it will drop in hills at 4, 6, 8, 12 or 24 inches apart,—the change from drill to hill seeder is made instantly by throwing upper lever shown in Fig. 318 into notch in lower lever. When ordered, the drill will be equipped with special sprocket wheel C 21 A, which will drop the seed at 5, 8, 11, 16 or 32 inches.

Fig. 318 also shows hill spacing plate and connections.

An arrow indicates a stationary peg on the back that makes the hills 24 inches apart. The pins placed in holes at outer edge of the plate, space the various distances under 24 inches.

Fig. 146 shows seed slide and index adjustment to sow various seeds. When the notch indicating seed to be sown is set, take it as a starting point from which to regulate the flow of seed exactly by moving the index a trifle backward or forward. Every man has his own ideas as to the amount he wants to sow. With this index he can suit himself.

Some round, smooth seeds flow through the discharge opening without the use of an agitator but for others it is absolutely necessary to insure continuous feed. We use a brush agitator, made of selected bristles—they do not injure the seed in the



Fig. 318

Seed Plate

White spots indicate heads of pins
Arrow shows where stationary pin is



Fig. 319

Swinging cut-off

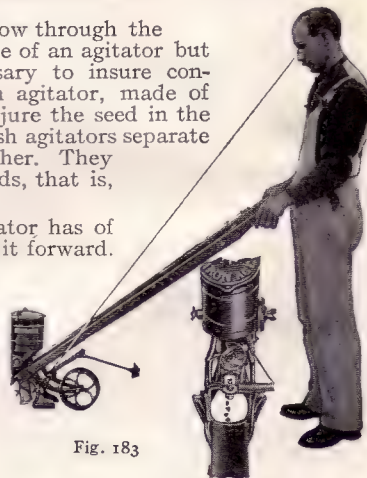


Fig. 183

No guesswork. Seed in full view of operator as it is being sown

IRON AGE

No. 6 Combined—Continued



Fig. 145

Price, \$.50

straight, narrow row which makes it possible to cultivate very close. The plow is adjusted in depth, by a thumb screw. When it is desired to scatter seed in a row over three inches wide, we recommend the use of opening plow, Fig. 145. It is largely used for sowing onion seed for sets. For drilling seed in very narrow rows, opening plow, Fig. 215, may be used. It will not drop in hills. Both plows can be applied to our Nos. 6, 7, 15, 16 and 22 drills.

Coverers close the furrow after the seed is dropped. They are flexible to prevent clogging with trash or lumps. A marker stick is pivoted at rear of the hopper and can be moved to either side by the foot. The marker drag can be adjusted in a second, from 6 to 20 inches wide.

All Iron Age drills are furnished with steel Locke Belt chains and adjustable cam tighteners. These are convenient not only as a working adjustment but when attaching chain or removing it.

Sugar Beet and Chicory growers will find this tool to meet every requirement. It will sow the seed accurately and without injury. The arch being high will allow the cultivation of these crops until they are well grown. A very large number of these tools now being used by prominent growers, where the best tools for the purpose are required, is the highest recommendation we can give them.



Fig. 215

Price, \$1.00

No. 4 Combined Double and Single Wheel Hoe and Drill Seeder

No. 4, Fig. 83, - \$11.00 Packed weight, 55 lbs.

No. 5, as Drill Seeder only, - \$8.00

No. 40, with Side Hoes and Teeth only, \$9.50

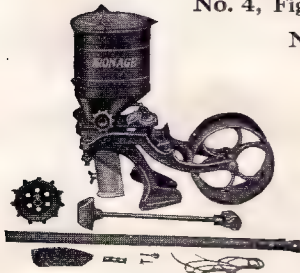


Fig. 133

No. 4 Drill attachment. Price, \$4.00



Fig. 83



With Fig. 215 Plow,
Sows in narrow rows.
Hand weeding needless

MANY gardeners do not want a Hill Seeder—we do not want to overload the buyer, but try to give him just what he needs and no more. The No. 4 is exactly like the No. 6 Combined, except that No. 4 does not have the hill dropping device and has a different plow. Fig. 133 is the No. 4 Drill attachment, which added to No. 1 Wheel Hoe makes No. 4 Combined.

The opening plow, on the No. 4 can be reversed, using it bottom side up, in onions, etc.—is adjustable for depth. (See Fig. 320).

Fig. 215 shows special spout and opening plow for this drill, when sowing seed for market onions, other than sets. The seed is sown in a very narrow row and hand weeding is needless as the side hoes of the Wheel Hoe can be set close without danger to the plants. If complete tool is wanted with Fig. 215, instead of corresponding parts sent regularly, specify by adding letter "B" to number of the tool, as No. 4 B.

Fig. 234 represents a plow similar to the regular plow on Nos. 6, 7, 15, 16 and 22 drills. It is known to our customers as an anti-clog plow. If drill is wanted equipped with Fig. 234, in place of the regular plow, order by adding letter "D" to the number, or No. 4 D.



Fig. 320

Regular opening plow, reversed



Fig. 234

Price, \$.50

No. 20 Single Wheel Hoe

OUR latest Single Wheel Hoe, a strong, light, durable, practical garden tool. When purchased complete, one pair each side hoes and rakes, three cultivator teeth of solid steel, and a landside plow are furnished. With these different working tools it fills every need of the gardener for cultivation, etc. In addition, it is built to take two different seed drills, and two fertilizer attachments, in each case, making complete, practical machines in themselves. You can begin with the Wheel Hoe and add the other parts as you find they are needed. The Wheel on No. 20 is 16 inches high and has $1\frac{3}{4}$ inch tire. It is supported by two rigid arms of steel tubing, securely attached to a malleable frame casting to which all working tools and the handles are attached. The handles are adjustable for height and the tools may be attached in various positions and spacing for the necessary work.

This tool can be furnished with Side Hoes only and as such is known as No. 21 Iron Age Single Wheel Hoe.

No. 20, Fig. 135, - \$6.00

Packed weight, 28 lbs.

No. 21, with Side Hoes

only, - - 4.00

Fills every need of the gardener



Fig. 135

Single Weeder Attachment, Fig. 84

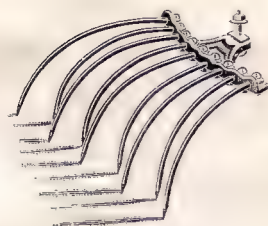


Fig. 84

Single Weeder attachment
Price, \$.80

Pulverizes the soil and destroys the small weeds just appearing. One or more teeth can be removed to permit working in narrow spaces.

Other attachments which can be used on No. 20 are Double Moldboard Plow, Fig. 170—Hilling attachment, Fig. 236—Special Fender Side Hoes, Fig. 216—Single Tooth, Fig. 112—Onion Set Gatherer, Fig. 33, page 9

No. 15 Combined Single Wheel Hoe, Hill and Drill Seeder

WE make this combination by putting the No. 6 Hill and Drill Seeder attachment, Fig. 134, on the No. 20 Wheel Hoe. Sows in continuous rows or drops in hills at 4, 6, 8, 12 or 24 inches apart, the change being made instantly. We have described this seeder attachment fully on pages 10 and 11—it is exactly the same as used on No. 6 Combined. Special opening plows shown in Figs. 145 and 215, page 11, will also fit this tool. If the customer wants only a Hill and Drill Seeder, we can furnish our Iron Age No. 16, which is the same as shown in Fig. 125, except that it does not include the working tools. Also, this tool will take the Nos. 25 and 26 Fertilizer attachments, shown on page 14, making complete Distributor or Fertilizer Drill in each case.

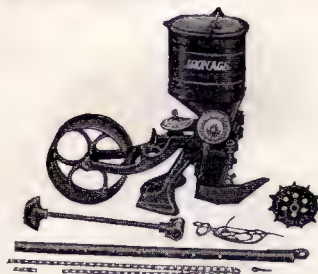


Fig. 134

No. 6 Hill and Drill attachment
Price, \$5.00

IRON AGE

No. 15 Combined—Continued

No. 15, Fig. 125 - \$11.00

Packed weight, 45 lbs.

No. 16, Fig. 125

less tools - - 8.50



Fig. 125

The No. 15 Combination does the same amount of work as the No. 6 Combined, except that you cannot work astride the rows to such good advantage. The complete set of working tools is shown with Fig. 125. The seeder can be regulated exactly for flow of seed—most gardeners prefer to use a perfectly regulated hand drill to insure a good stand—skips mean so much of the crop that won't be there to be

harvested and too much seed in one place hinders growth and cultivation.

The No. 15 Combined is a very convenient tool for any gardener to own. After using one, you wouldn't be without it for

any money. Runs steady and is handled easily. You will be wishing for garden time, so you can use the tool.

No. 17 Combined Single Wheel Hoe and Drill Seeder



Fig. 133

No. 4 Drill attachment, price, \$4.00

IS made by applying Fig. 133 Drill attachment to No. 20 Single Wheel Hoe, and includes all of the tools shown in Fig. 127. This makes a complete Drill Seeder, and is the same as No. 15 Combined, except it will not drop seed in hills, and the opening plow is different. The latter is same as used on the No. 4 Combined and is reversible and adjustable for depth. (See Fig. 320 on page 11.)

If complete machines are wanted fitted with special opening plow, Fig. 234, or special spout and plow, Fig. 215, shown on page 11, order by adding the letters "B" and "D" respectively, to the numbers of the tool, as No. 17B for Fig. 234 and No. 17D for Fig. 215. Or, either of these plows will be furnished as attachments at the prices quoted on page 11.

If complete Drill only is wanted, we will furnish this machine without the

working tools for the Wheel Hoe. When so ordered it is known as No. 18 Iron Age Drill Seeder. This tool will also take No. 25 and No. 26 Fertilizer Attachments. With all these advantages of combination, Nos. 15 and 17 do not lose one single advantage of the original No. 20 Single Wheel Hoe.



No. 17, Fig. 127, \$10.00

Packed weight, 45 lbs.

No. 18, Fig. 127,

less tools - - \$7.50



Fig. 127

No. 25 Single Wheel Fertilizer Distributor

COMMERCIAL fertilizers are easier and more pleasant to handle than manure, and their very common use in these days has created a general demand for an inexpensive implement to apply them, both in furrows and for side dressing. For this purpose, we make a Distributor attachment for our No. 20 Single Wheel Hoe, which when attached and furnished without cultivating tools, hoes, etc., is sold as our No. 25 Fertilizer Distributor.

With it, fertilizer may be sown across the bottom of the furrow or on either side, so it will not come in contact with the seed, possibly injuring it. Or, you can use the tool for



Fig. 184
No. 25 Fertilizer Distributor attachment
Price, \$4.50

side dressing of crops, forcing earlier maturity and making a more tender and salable crop. The tool is light and convenient to get around with. The capacity of the hopper is a little over four quarts. All castings inside the hopper, that come in contact with the fertilizer, are galvanized to prevent rusting. A revolving wheel feeds the fertilizer.

You can buy the tool as a Distributor and purchase at any time the necessary working tools, and all attachments, including the drill, to use the machine as a Single Wheel Hoe, and Drill Seeder, or buy the Distributor attachment and apply to your No. 20 frame.

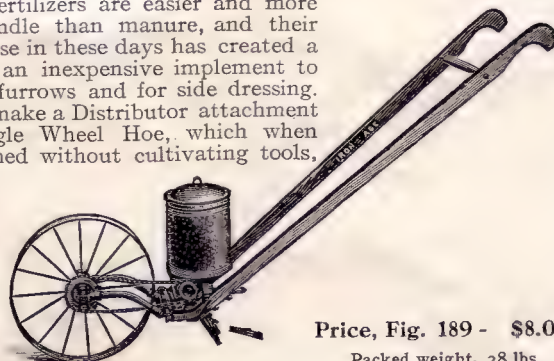


Fig. 189

Price, Fig. 189 - \$8.00

Packed weight, 28 lbs.

No. 26 Fertilizer Drill

THIS tool is made by attaching No. 26 Fertilizer Drill to No. 20 Single Wheel Hoe, and is sold as a complete tool, less the working tools, or as an attachment. This tool makes its own furrow, drills the fertilizer and covers it all in one operation. Sows fertilizer from $\frac{3}{4}$ to 3 inches in

depth. Is light draft and convenient to handle. As it is often used in advance of seed drill, it is desirable that a marked furrow be left as a guide—so we furnish a marker wheel as shown in Fig. 303. Order Nos. C154, C155. (Frame and Wheel.)



Fig. 303 with special marker wheel
Price, wheel and frame only, \$1.75

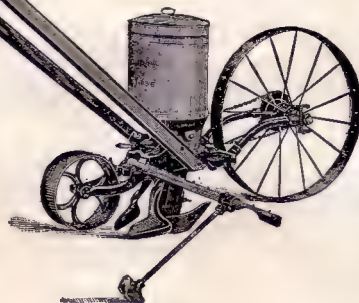


Fig. 237

Price, \$8.50

Packed weight, 40 pounds



Fig. 235

No. 26 Fertilizer Drill attachment

Price, \$5.00

Nos. 25 and 26 when sold as attachments can be applied to our No. 1 Double and Single Wheel Hoe, as well as the No. 20. They add just that much real value to the original tool, as each combination is complete in itself and does your work perfectly.

IRON AGE

No. 22 Combined Fertilizer Distributor, Hill and Drill Seeder

WHILE commercial fertilizers are more convenient and more pleasant to handle than manure and are practically necessary in order that you may compete with your neighbor, they are not profitable, unless applied in an economical way. The gardener must know not only what kinds of fertilizer to put on, but how. That's where our No. 22 Iron Age comes in—it applies the fertilizer in connection with the seed just where it will do the most good and without injury to the seed.

Although on a smaller scale, the distributor is built on practically the same lines as the one used on our Planter, a complete description of which is shown on page 44. The flow of fertilizer is regulated by a gate, adjusted by thumb screw, and is divided in the spout, at the discharge opening, into two streams. The distributing tubes, made of brass spring wire, are sufficiently flexible to meet the necessary adjustment of the plows to which they are attached. The tubes will not rust—other parts likely to rust are galvanized. The fertilizer hopper holds over four quarts.

The fertilizer distributor has two opening plows—one or both may be used and they are adjustable for depth and width also—the fertilizer can be placed as near the seed as you wish or one plow used and the fertilizer distributed in the same line as the drill. Flexible coverers follow the plows, throwing the soil over the fertilizer.

The Hill and Drill attachment used on this tool is about the same as used on our Nos. 6 and 15 Combined,—the only difference being construction changes necessary to attach and operate it on No. 22. It is a complete attachment with its own opening plow and flexible coverer—opens its own trench through the mixed fertilizer and soil, and deposits the seed, without injury, in hills or continuous rows as wanted.

The Wheels are steel, 16 inches high, light and strong. Both distributor and drill are firmly supported and braced. Below we explain another use for this tool when set up, as



Fig. 130

Price, Fig. 130,
\$18.00

Packed
weight,
65 lbs.

Net weight,
50 lbs.



As a
Side Dresser

Price, Fig. 132, \$13.00

Packed weight, 40 lbs.
Net weight, 27 lbs.

Price, Hill and Drill
Seeder attachment, \$5.00

No. 23 Fertilizer Distributor

TO be used as a Side Dresser. It is simply a part of No. 22—without the Hill and Drill Seeder attachment and with small two-wheel truck at the rear. The tool can be purchased complete in this form and the Hill and Drill Seeder attachment added if needed later.

Broad-casting fertilizer before seeding is wasteful. Try applying part of the fertilizer in the row at seeding time and then use this tool to side dress with quick-acting fertilizers, such as nitrate of soda. This will force the growth, make crop more tender, will sell quicker and at higher prices.

Fig. 132

No. 8 Hill and Drill Seeder

HAS capacity for the larger seeds and yet accurately hills and drills all of the smaller varieties. It is light, and simply constructed but strong enough to do its work. The wheel is steel, 15 inches high and two inch tire—a great improvement over the old style cast iron wheel. Has a low hopper with the seed close to the ground—permits accurate spacing. The hopper has a capacity of four quarts—even the largest gardeners can carry a sufficient quantity of the most bulky seed—no need for constantly re-filling. As the tool is light and runs easy, the extra weight of seed will not be noticed. A revolving brush agitator makes an absolutely sure feed, and sows all of the seed accurately and without injury. Our opening plow is "clog-proof," rides down all trash in the way. A thumb screw adjusts it for depth. Fig. 119 shows special plow for sowing onion seed for sets—sows in a row over three inches wide. Can be used only on this tool. Price, 50 cents. Seed can be dropped in hills 4, 6, 8, 12 and 24 inches apart by using 6, 4, 3, 2 pins and 1 pin respectively, in the outer rim of holes in the pin wheel. The one pin is stationary on the back of the wheel. By simply **hooking out** a small lever which operates the seed cut-off, you have a drill, and reversing, you space for hills. A spring holds the coverer in place so that it always covers, but it is flexible enough to pass obstructions. The wheel packs the soil. A convenient finger latch on the handle operates a shut-off and regulates the flow of seed. The marker is adjustable.



Fig. 95

Price, Fig. 95, \$11.00

Packed weight, 40 lbs.

"Advance" Fertilizer Drill

THE best low-priced distributor on the market. A first class tool for drilling peas, beans and corn. The distributing disc is galvanized iron and will not break or rust. Hopper holds 18 quarts and is lined at the bottom with galvanized iron. A steel agitator keeps the seed moving, and a lever with thumb nut controls the seed opening. The galvanized spout extends as low as legs of the drill and has steel piece attached to spread seed over the row. A loop is fastened at each side of the wheel so that horse can be used—a small boy can operate it easily. The feed is operated by gearing and is positive. A lever throws in and out of gear. The wheel is steel—light, yet strong. We use a high wheel because it runs easier. Made of good material, well put together, nicely finished and a ready seller. A hand tool for any farmer to own.

Price, Fig. 56, \$6.75

Packed weight, 46 lbs.

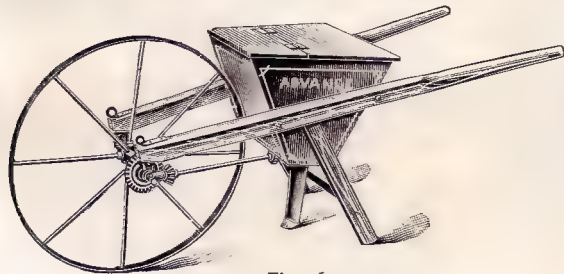


Fig. 56



Fig. 119

IRON AGE

"New Model" Seed Drill

Price, Fig. 28, \$8.00

Packed weight, 50 lbs.

Exact adjustment
for flow of seed.
Marker adjusted
either side.

Can roll soil light
or heavy

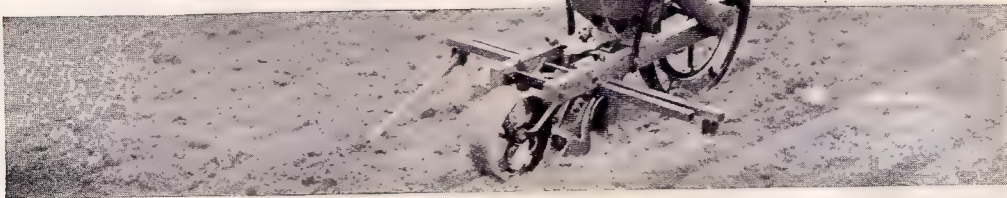
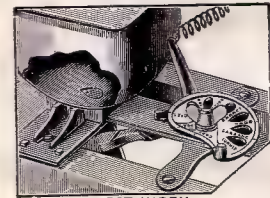


Fig. 28

A SEED DRILL with an established reputation—popular with seedsmen and market gardeners—a "model" in the truest sense of the word. It was built and perfected out of our long, wide experience in the manufacture and marketing of seed drills. We have profited by the mistakes of others and have avoided their errors in construction. On many points, the "New Model" is a better tool than any other drill of similar design.

We have exact regulation of seed discharge by using an eccentric Index or Indicator which adjusts the slide for seed opening exactly where you want it. There is no series of holes which have to be used whether they answer or not. The index is in plain sight when the tool is in operation—the names of the principal seeds are shown on it—no reference table is necessary. While we provide this marked Index, we suggest that each man adjust at the mark, a trifle ahead or to the rear of the mark, according to his preference for sowing—every man can suit himself but he gets an exact adjustment which he cannot get elsewhere. The flow of seed can be instantly stopped by a swinging cut-off, operated by a cord and ring on the handles. Prevents loss at ends of rows and is preferable to a slide cut-off that is likely to be jammed by falling seed.



PERFECT INDEX

Fig. 29



Fig. 234
Price, \$.50



Fig. 304
Price, \$.50

The marker is firmly held in place and easily adjustable. The covering wheel is attached to a swinging frame and by varying pressure on the handles, the operator can roll lightly or other wise. The main wheel is high with wide rim that keeps it from sinking into soft earth. Unless otherwise ordered, we furnish all these drills with steel opening plow. It is reversible from top to bottom and adjustable for depth. (See Fig. 320.) When wanted with opening plow, shown in Fig. 234, the complete tool should be ordered as No. 2 New Model. This plow is practically clog-proof. It is sold as an attachment for any New Model Seed Drill.

Our new No. A22 Opening Plow is used largely for sowing onion seed for sets. This plow will scatter seed in a row over three inches wide. (See Fig. 304) If drill is wanted fitted this way, order "equipped with A22 Plow."



Fig. 320
Regular
opening
plow,
reversed

No. 9 Single Wheel Hoe, Cultivator, Plow and Rake

A FINE TOOL for the kitchen garden and poultry yard—from early spring to late fall, there is some work for this tool.

The single hoe is best in such cases as the rows are usually narrow and the work done principally between them. Plants of small growth can be hoed both sides at once by placing the wheel on the left side. With the No. 9 the narrowest spaces can be worked, using but one cultivator tooth if necessary. Side hoes can be furnished as narrow as 4 inches for working between rows. But one rake need be used. It is a cheaper tool than either No. 1 Combined Double and Single Wheel Hoe or No. 20 Single, but it does practically the same amount of work. It is a light, well built tool and having but one wheel, runs very steadily. The wheel is steel, 16 inches high—the frame consists of one piece of steel tubing, bent to the proper shape to give strength, and securely attached to the malleable casting that carries the working tools and handles. The latter are adjustable for height. The working tools include a pair each, side hoes and rakes, four cultivator teeth and landside plow. With the latter, deep furrows can be opened and covered. You can hill such crops as potatoes, celery, etc.—in poultry yards, big and little, the soil can be stirred thoroughly, work that is usually done with a special plow.

Single Weeder attachment, Fig. 84, page 12, fits this tool. Some of the teeth can be removed, if necessary. Price, \$.80. Also **Double Moldboard Plow**, Fig. 170, page 9, price \$1.40.



Fig. 78

Price, No. 9,
Fig. 78, complete
- - - \$5.25

Packed weight, 28 lbs.

Price, No. 10, plain
(hoes only) - \$3.25

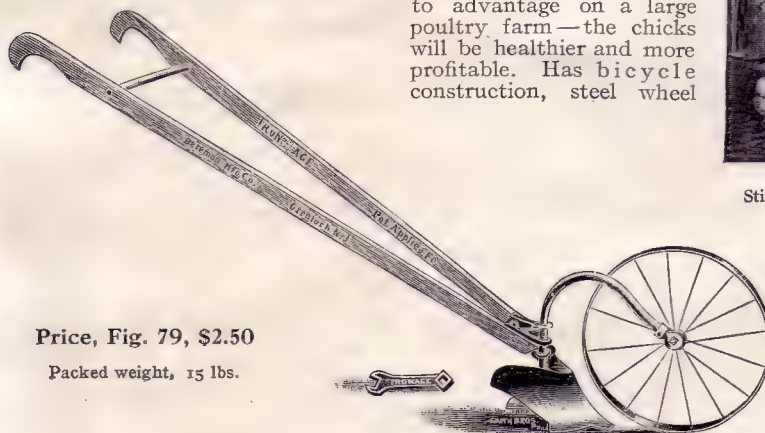


No. 11 Wheel Plow

A LIGHT, graceful, low priced tool, that can be used as a wheel plow anywhere but is especially recommended for turning under accumulations in the poultry yard. Scatter some oats and turn them under with the plow, so the chicks will have to scratch for the feed. The tool will pay for itself in this way alone, in the smallest poultry yards, and several tools can be used to advantage on a large poultry farm—the chicks will be healthier and more profitable. Has bicycle construction, steel wheel



Stirring the poultry yard with
the No. 11



Price, Fig. 79, \$2.50

Packed weight, 15 lbs.

Fig. 79

(16 inch) and steel tube frame. It will plow from three to four inches deep and throw a furrow four to six inches wide. Easy to push and perfect in its work.

IRON AGE

No. 12 Wheel Plow and Cultivator

Price, Fig. 120, \$3.50

Packed weight, 20 lbs.



Cultivating small plants in narrow rows

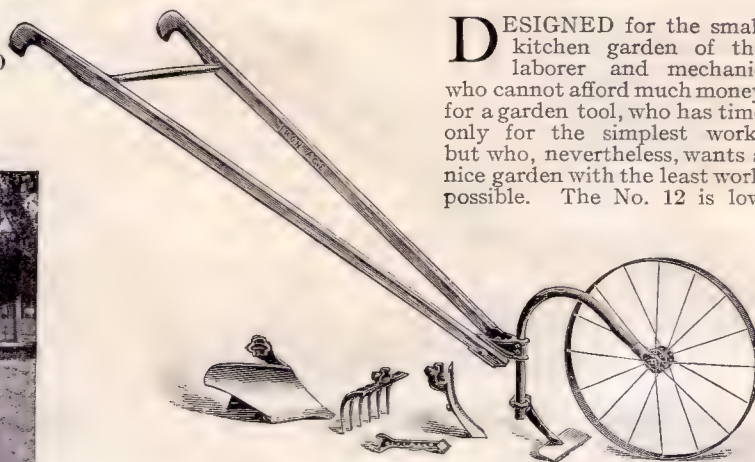


Fig. 120

DESIGNED for the small kitchen garden of the laborer and mechanic who cannot afford much money for a garden tool, who has time only for the simplest work, but who, nevertheless, wants a nice garden with the least work possible. The No. 12 is low

priced, but complete in itself for the work to be done. It has four tools as shown in the engraving—it will plow in all but hard ground, open furrows and cover them, hill growing crops, hoe, rake and cultivate. The average weight with one working tool is about eight pounds, and it is easily carried wherever you want to work. It is used as readily as a common hoe but is quicker and does more good. Has the steel 16 inch wheel and a steel tube arch attached to a malleable frame casting. This tool, also, can be used to advantage in stirring the soil in poultry yards.

Scuffle Hoes, like the one shown on the tool in Fig. 120 can be furnished in any width up to 12 inches.

No. 19 Wheel Plow and Cultivator

Price, Fig. 193, \$3.25

Packed weight, 22 lbs.



Fig. 193

SOME sections require such a tool equipped with a higher wheel than ordinarily furnished. The No. 19 fills the bill in this respect—the wheel is steel, 24 inches high and has 1 inch tire—the frame is an all-steel arch in three parts, compact, light and durable, with adjustable steel supports for the handles. A light weight, low priced tool with the working tools necessary, to do all of your work. We furnish with the No. 19 a plow to break

ground, open furrows and cover them, and cultivate—a special scuffle hoe to break soil that is hard from rain, baking or tramping—a malleable rake to level and rake, and cultivate the crop while small—two sizes of cultivator teeth for making small furrows, deep cultivation, etc.



Turns a good furrow

"Gem" Single Wheel Garden Hoe

Price, Fig. 30, \$5.00

Packed weight, 25 lbs.

With 5 teeth
only - - \$3.75



Fig. 30

A THOROUGHLY practical garden tool that has given entire satisfaction to many thousands of users—not one single complaint has been reported and the demand for it increases rapidly. The "Gem" is largely built of steel and malleable iron,—wheel and handles may be adjusted for height, and tools adjusted on the frame as needed. All tools are fastened in notches on under side of the frame—they will not get loose and slip when working. The wheels are adjusted in height by moving frame braces up or down on ratchet at front end of frame. It is light, compact, and has the necessary strength to make it durable. The working tools include set of fine slender cultivator teeth, each stamped

from one piece of steel and guaranteed for thorough work, especially in hard soil—two sizes of scuffle hoes for working between the rows, and a pair of plows which can be used together as one plow or separate for hilling. The scuffle hoes are four and eight and one-half inches wide. A special size, six inches wide, will be furnished when ordered. The "Gem" is nicely finished and when set-up makes a handsome, quick selling tool.

Fig. 32 Landside Plow can be applied only to "Gem" Wheel Hoes, Single or Double, and is furnished as an attachment. Opens a straight, deep furrow.



"Gem" with Fig. 32 Plow
Opens straight, deep furrow

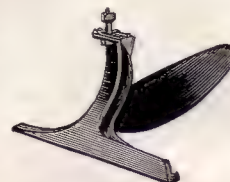


Fig. 32
For "Gem" Hoes only
Price, \$.90

"Gem" Double Wheel Hoe

Price, Fig. 31, \$6.00

Packed weight,
30 lbs.

HAVING two wheels instead of one, this tool can be used astride the rows in first and second workings of the crop. Side hoes are furnished instead of scuffle hoes, for close work. The axles are made to slide together like the parts of a telescope and bring the wheels close up, so that the tool can be used as a single wheel hoe, between the rows. The frame is exactly the same as used on the Single Wheel "Gem" and has same adjustments for tools and height of wheels.

Fig. 33, Onion Set Gatherer, shown on page 9, can be used on either "Gem," but is best adapted for the Double Wheel tool. Is used by passing under the row; also, makes a very good scuffle hoe.

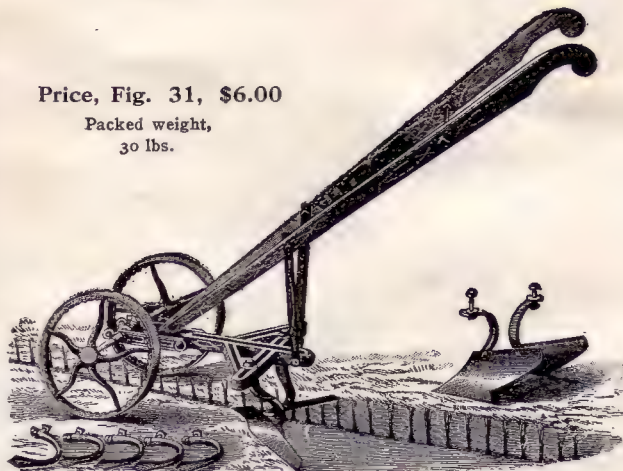


Fig. 31

IRON AGE

No. 6 Horse Hoe and Cultivator

AN up-to-date tool, for the 20th Century farmer who wants quick, thorough work and a machine that can be adapted to the necessary operations to produce a first class crop. He also wants a tool that he can hitch to, confident that when he unhitches, he will have done a good day's work and that the tool will still be in good shape for the next day. The No. 6 meets these requirements—it can be adjusted for a wide variety of uses, and to meet the many conditions common to each vicinity—it has the necessary

strength, yet is light and compact. Has a long, high steel frame that makes the tool run steady and clear of trash. The hoe standards are solid steel, securely attached to the frame bars by malleable ratchet castings. These give several easy adjustments to the side hoes, both side-

Fig. 160

Price, Fig. 160, \$6.25

Packed weight, 83 lbs.

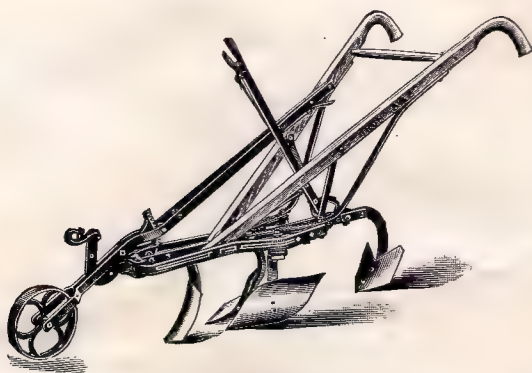
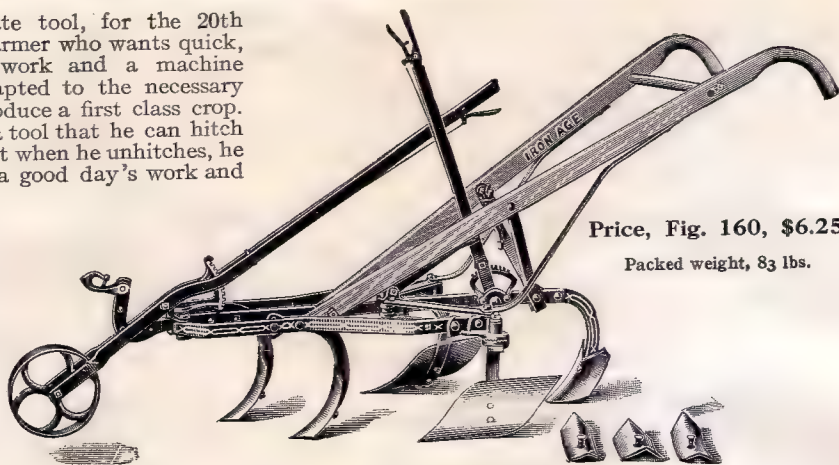


Fig. 80

No. 6 shown as a Furrower

wise and at different angles. They can be reversed for hoeing or changed from side to side with points forward, for covering. (See Fig. 104, on page 24.) The Horse Hoe when used as a cultivator, expands to a width of 30 inches and closes to 14, sufficient for ordinary purposes. The ratchet castings can be placed, reversed, on the inside of the bars, bringing the side hoes together, as in Fig. 80, for opening furrows for manure, etc. Cultivator teeth, attached in this position, are 11 inches apart—the teeth are

carried on the hoe standards. A lever expander changes the tool instantly, while in motion, from extreme width to the narrowest position. It has a pair of double steel expander bars and long steel lever, placed in easy reach, and with its malleable connections, is perfectly fitted and pivoted to work smoothly—is strong, simple, rigid and has stood the test of many years without change.

Fig. 160 shows the tool with lever wheel. The steel lever is attached to forward part but the handle is in easy reach—with it you can regulate the working depth while the tool is in motion—a good time-saver in the busy season.



Rear view showing expander

No. 6 Horse Hoe

Fig. 100 shows the No. 6 with lever expander but with plain wheel in place of the lever wheel.

Fig. 102 shows the tool in its simplest form. It is equipped with plain expander bars, held in place by steel stirrup clamp. While not so convenient for adjustment, Fig. 102 is more rigid and makes the most durable form of Horse Hoe, and stands the rough knocking around of careless or green men.

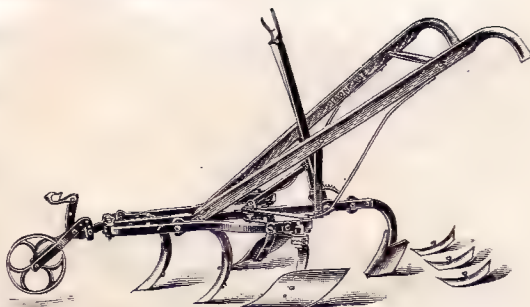


Fig. 100
No. 6 Horse Hoe and Cultivator, plain Wheel
Price, \$5.75

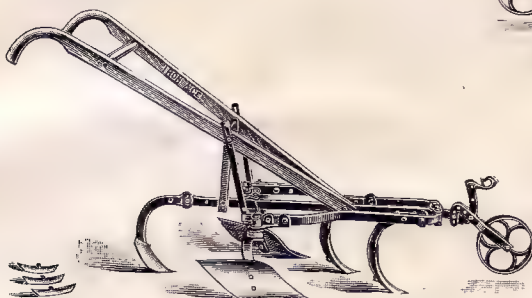


Fig. 102
No. 6 Horse Hoe and Cultivator without Lever Expander. Price, \$5.00

the cultivator is opened wide and center tooth or sweep cannot close the furrow. A two-horse cultivator working astride the row does not have this fault. On the No. 6, we fill in the open furrow and more thoroughly pulverize the soil by attaching at each side an extra standard and narrow tooth, changing the tool to a seven tooth machine. It is sold complete in this form or you can have the attachment to complete your machine.

In Fig. 101, the tool is equipped with No. 18



Fig. 180
Furrow-closing attachment. Price, \$1.25

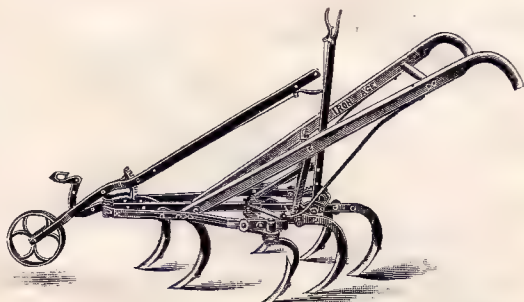


Fig. 71
No. 6 as a Cultivator, with Furrow-closing attachment. Price, \$6.75

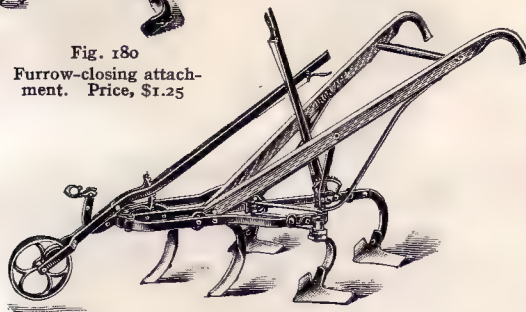


Fig. 101
No. 6 equipped for level cultivation, with No. 18 Sweeps

sweeps and set to make a wide cut at very little depth. This gives the shallow, level cultivation which farmers are coming to think is the right way to keep the moisture in the ground. We used to use plows for cultivation but actual experience shows that the new way is better every time. The sweeps can be set to run deeper and can be used in various combinations. They are used a great deal for cutting out thistles. Made in 8, 10, 12 and 15 inch widths (see inside back cover). This attachment can be applied only on Nos. 6 and 7. Prices, 28, 32, 38 and 45 cts. each, respectively.

IRON AGE

Attachments for Horse Hoes and Cultivators

They can be set up and adjusted in several different ways and they take many attachments which help you to meet every condition of crop or soil. In most cases, these attachments are made to fit not only machines as made now but old style tools as well. You don't have to buy a new complete tool in order to keep up with the times, but simply get the necessary attachments.

Fig. 167 shows the side hoes reversed with rounded edge forward to take away soil from a ridged crop or for close hoeing.

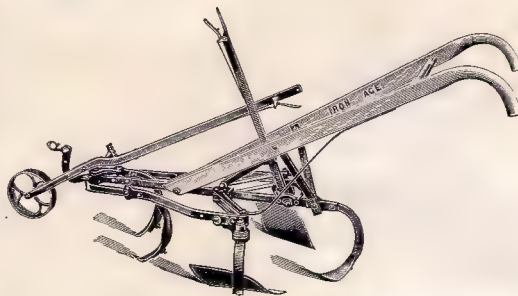


Fig. 167

No. 6 with Horse Hoes reversed

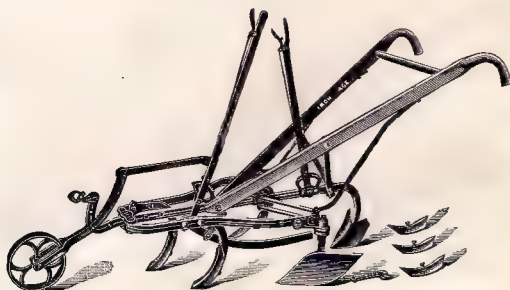


Fig. 188

Showing application of depth regulator attachment
Price, attachment only, \$1.75

The hilling attachment, shown in Fig. 103, is used in cases where higher ridging is wanted than the regular side hoes can do. To apply, simply remove four standards, attach one of them on the middle bar, and the short standards of the hilling blades to the side bars. We do not furnish any cultivator standard with this attachment. Can be applied on Nos. 6 and 1.

Vine lifters, easily attached as in Fig. 73, are used in all vine and brush crops but principally in working sweet potatoes. Can be applied only on Nos. 6 and 1.

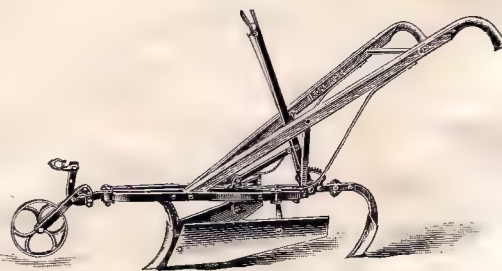


Fig. 103

Showing application of hilling attachment
Price, attachment only, \$1.50

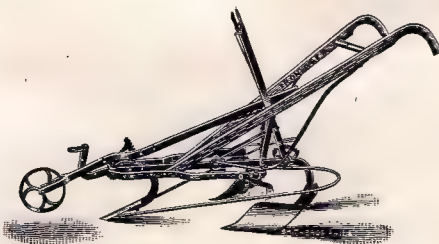


Fig. 73

Showing application of vine lifter attachment
Price, attachment only, \$1.50

Break Pin Tooth Clip, Fig. 250. It provides for use of a wooden pin in the upper end of the cultivator standard instead of a bolt. When the tooth strikes an obstruction, the pin breaks and the standard is not even bent. The clip holds the standard firmly in place. Will fit any Iron Age five or seven-tooth cultivators.

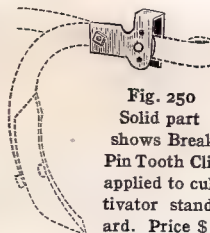


Fig. 250
Solid part
shows Break
Pin Tooth Clip
applied to cultivator
standard. Price \$.10
Set of 5, \$.50

Attachments for Horse Hoe—Continued

The Leveler is applied as shown in Fig. 104. Is used on the Horse Hoe when covering corn, potatoes, peas and other like crops. Also, in making up rows for root crops, etc. The side hoes are reversed for covering. Can be used on any Iron Age Horse Hoe.

Runner attachment, Fig. 105. When the tool is used as a coverer, steel runners can be attached in place of the wheel—this steadies the tool and there is no chance of displacing seed, as with the wheel. Using two horses would be still better—they would be each side of the row and not on it. The runner attachment can be used on any Iron Age Horse Hoe.

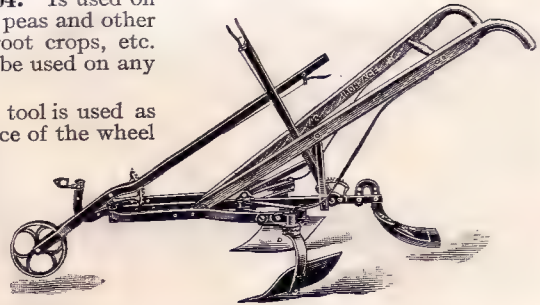


Fig. 104
Showing application of leveler attachment
Price, attachment only, \$1.00

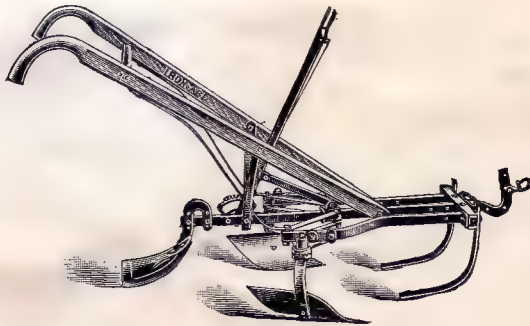


Fig. 105
Showing application of runner attachment
Price, attachment only, \$1.00

Side Hoe attachments. Fig. 211 on page 27 shows set of side hoe parts complete for No. 35 Weeder and Cultivator. They will fit any Iron Age Horse Hoe and Cultivator, except No. 38, for which we furnish Fig. 212. This also will fit any Iron Age Horse Hoe and Cultivator except No. 35. Both brackets and standards are adjustable so the hoes can be set for angle and depth.

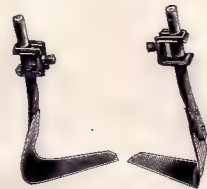


Fig. 212
Side Hoe attachment
for No. 38
Price, attachment only,
\$1.00

No. 7 Horse Hoe and Cultivator

Price, Fig. 161 - - \$7.25
Packed weight, 80 lbs.
With plain wheel - 7.00

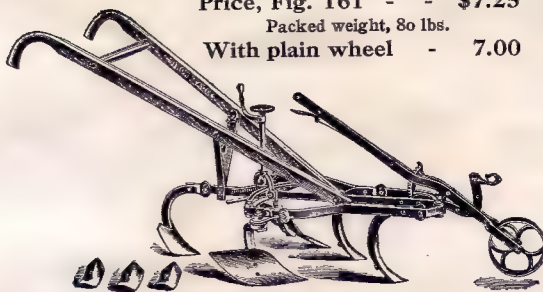


Fig. 161

other, yet both sides are adjusted in the same way.

The No. 7 also has the wheel held firmly in place by a pair of ratchet castings which allow nice adjustments by slight loosening of the nuts—takes about one-fourth of the time necessary for the ordinary style wheel irons. See Fig. 238. Attachments. Figs. 180, 211 (or 212), 104, 105 and 250, shown on pages 22, 23 and 24, can be used on this tool.

FOR the particular farmers and gardeners who want their tools set exactly so, for cultivation of a variety of crops. This tool is the same as the No. 6, except it has a crank wheel expander, combining the good points and overcoming the disadvantages of lever and old style clamp expanders. Release the wheel clamp, move to right or left, and the cultivator is adjusted wide or narrow as you need it. When set, tighten with the wheel clamp and you have a rigid tool. One side may be set nearer the middle bar than the

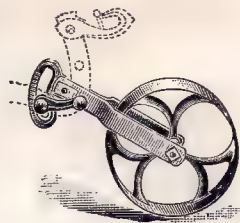


Fig. 238

IRON AGE

No. 8 Horse Hoe and Cultivator With Screw Expander

Price, Fig. 157 - - \$7.25

Packed weight, 81 lbs.

Price, with plain wheel - 6.75

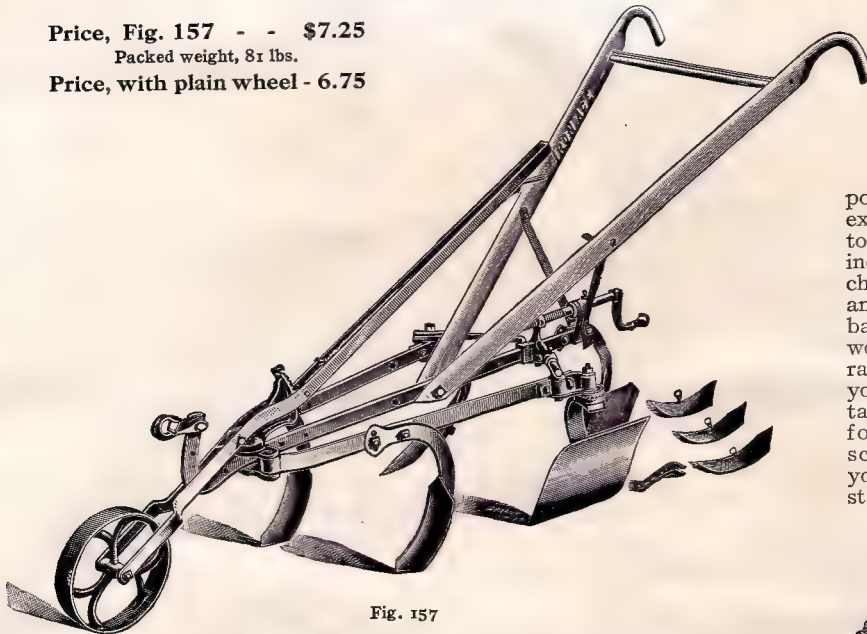


Fig. 157

to come together and, with adjustment of the angle of the side hoes, form a double moldboard plow, used largely for opening furrows.

Another distinct advantage on the No. 8 is that each side bar has a set screw adjustment to connecting rods of the expander. Either wide or narrow rows may be cultivated, and you have separate adjustment, so that one bar can be set wide, the other, narrow. In cultivating growing crops, in going twice to the row, you often want to set the right hand bar in, so that the rear tooth will fill in furrow left by front outside tooth next to the crop. An open furrow would let the sun and wind dry out the roots. The No. 8 does this to your entire satisfaction. **Attachments.** Figs. 211 (or 212), 104, 105 and 250 on pages 23 and 24 can be used on this tool.

No. 5 Orchard Cultivator

A MODERATE priced, nine-tooth tool, for cultivation of any orchard but especially for peach and orange groves, where they are used extensively. Spreads to nearly four feet and closes to 20 inches. Is built for the purpose with a special frame to carry the extra teeth—is rigid and has good clearance for the teeth. Can be equipped with either style wheel but with clamp expander only. **Attachments.** Figs. 211 (or 212), 104 and 105 on page 23, can be used on this tool.

Price, Fig. 70 - \$7.25

Packed weight, 80 lbs.

Price, with plain wheel - 7.75

Price, with lever wheel - 8.25

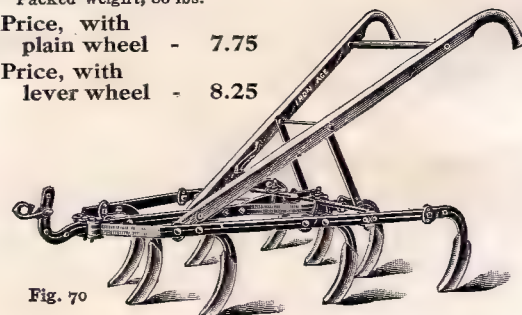


Fig. 70

THE screw is a flexible but an exact and rigid adjuster—the screw expander on the No. 8 can be set at any point from the widest expansion, 28 inches, to its narrowest, 9 inches—the slightest change can be made and yet hold the side bars securely. A pawl, worked in teeth in a rack, would compel you to make a certain amount of change for each cog—the screw stops where you want it. The standards can be set



Fig. 166

Showing the operation of the screw expander

No. 1 Horse Hoe and Cultivator

Price, Fig. 10	- - -	\$3.15
Packed weight, 50 lbs.		
With plain wheel	- - -	3.65
With lever expander	- - -	3.90
With lever wheel	- - -	4.15
With horse hoe and sweep	- - -	4.50

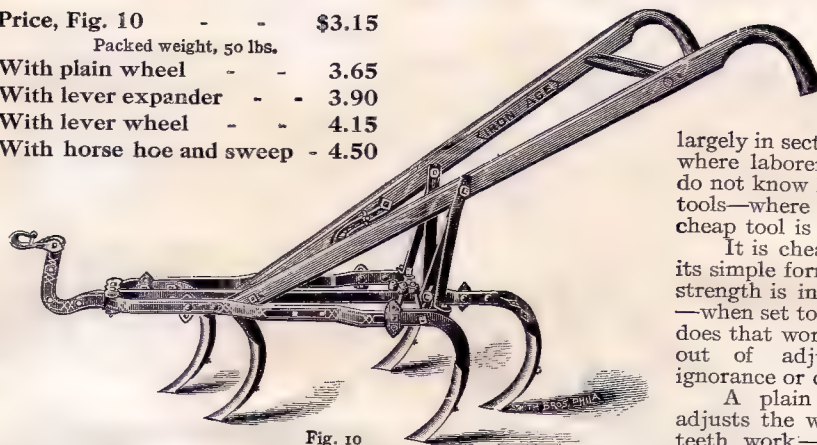


Fig. 10

FIG. 10 shows the No. 1 in its simplest form—a plain five tooth cultivator. It is sold

largely in sections of the country where laborers are careless or do not know how to handle the tools—where a strong, rigid, cheap tool is needed.

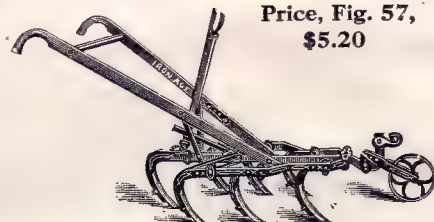
It is cheap only because of its simple form, and its greatest strength is in that simple form—when set to do certain work it does that work and can not get out of adjustment through ignorance or carelessness.

A plain clamp expander adjusts the width at which the teeth work—they open to 24 inches and close to 9 inches. shown on pages 23 and 24 can

Attachments. Figs. 188, 211 (or 212), 73, 103, 104, 105 and 250, be used on this tool.

No. 1 Cultivator with Seven Teeth

Fig. 57 represents the seven-tooth No. 1, with lever expander—the frame is punched to take the extra teeth, so they can be used or not, as needed. When equipped regular with No. 1 teeth (2 inches wide) or with narrow No. 0 teeth ($1\frac{1}{4}$ inch), the tool gives excellent service in first workings or in level cultivation. The teeth run deep but throw small furrows that do not harm the young plants. Cultivation is done thoroughly under all conditions of soil. Cultivates 24 inches at its widest, and closes to 10 inches. Is furnished regularly with plain wheel, but lever wheel will be shipped when ordered that way.



Price, Fig. 57,
\$5.20

Fig. 57

No. 36 Horse Hoe and Cultivator

THIS is the tool known as the "Acme," which we sold for many years and will be readily recognized by our old customers, who have found it entirely satisfactory where hilled crops seem desirable. The hilling blades are pointed and shaped to enter hard ground,—will not clog in sod or where there is coarse manure—because of their shape, they do not need change of angle as on other horse hoes—because the blades are bolted securely to the standards with no blocks between, they are rigid in operation. The tool has lever expander—opens to 24 inches and closes to 9 inches. **Attachments.** Figs. 188, 211 (or 212), 104, 105 and 250, shown on pages 23 and 24 can be used on this tool.



Price, Fig. 162, \$4.90
Packed weight, 65 lbs.

Fig. 162

IRON AGE

No. 35 Weeder and Cultivator



Price, Fig. 148, \$6.75

Packed weight, 70 lbs.

Fig. 148

ESPECIALLY for cultivation of sugar beets but may be used by all truckers with equal success. Is a great favorite with the sugar beet growers because side hoes are used to cut the surface close to the young beets without injuring the plants by throwing soil on them—at the same time three 1 1/4-inch teeth thoroughly cultivate the soil in the middle. A rear sweep, 8 inches wide, destroys all remaining weeds, gives you that much extra cultivation and turns back toward the plants (but not on them)

loose mellow soil, replacing the hard and weedy ground that the side hoes have taken away.

As the crop grows, the side hoe weeders are taken off and narrow cultiva-

tor teeth put on, making the tool a plain cultivator that does fine work. Is fitted with a lever expander that opens the cultivator to 22 inches and closes to 12 inches.



Fig. 211

Side hoe attachment for No. 35. Price, \$1.00

Fig. 211 shows the side hoes as an attachment which we can furnish for any Iron Age Cultivators and Horse Hoes, except No. 38. Both brackets and standards are adjustable so that the hoes can be set for angle and depth.

Other attachments. Figs. 104, 105, and 250 on pages 23 and 24 can be used on this tool.

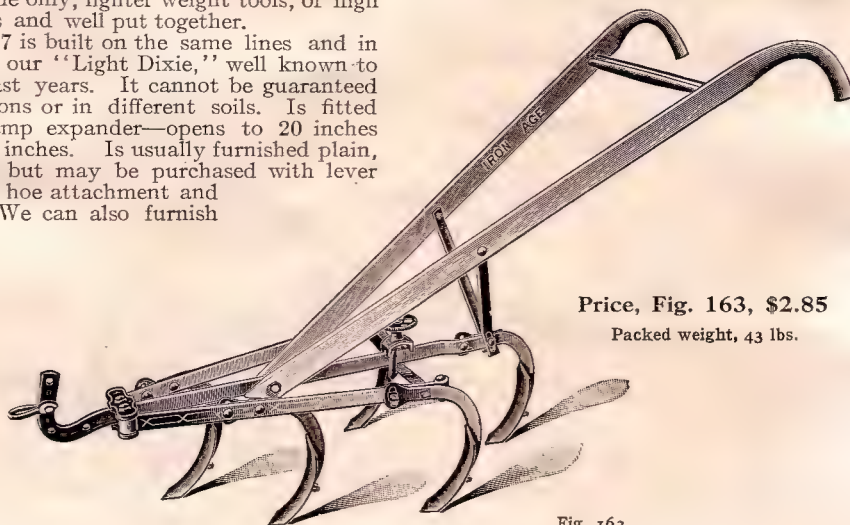
No. 37 Cultivator

FOR use in light, sandy soils, common to South Atlantic and Gulf States. Other Iron Age Horse Hoes and Cultivators have been found too heavy for satisfactory work in such soils—so we have been mak-

ing for this trade only, lighter weight tools, of high grade materials and well put together.

The No. 37 is built on the same lines and in same weight as our "Light Dixie," well known to the trade in past years. It cannot be guaranteed for other sections or in different soils. Is fitted with wheel clamp expander—opens to 20 inches and closes to 9 inches. Is usually furnished plain, as in Fig. 163, but may be purchased with lever expander, horse hoe attachment and plain wheel. We can also furnish with bent side bars instead of straight, when so ordered.

Attachments. Figs. 104, 105, 211 (or 212) and 250 on pages 23 and 24 can be used on this tool.



Price, Fig. 163, \$2.85

Packed weight, 43 lbs.

Fig. 163

No. 1 Combined Harrow and Cultivator

Price, Fig. 106, \$5.00
Packed weight, 66 lbs.

Price, plain harrow,
\$3.75

For plain wheel, add
\$.50

For lever wheel, add
\$1.00

For lever expander,
add \$.75

No. 2, with lever
expander and wheel,
\$4.50

No. 2, plain, \$3.25

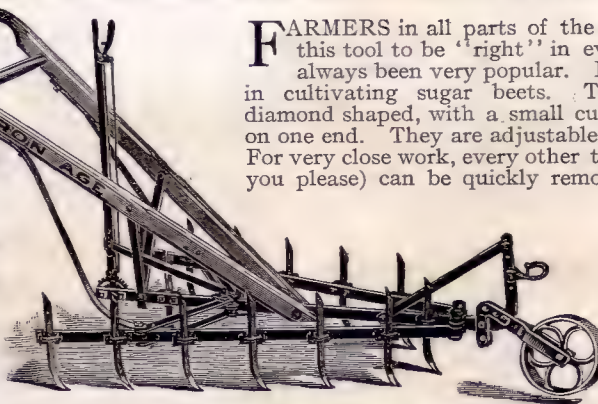


Fig. 106

FARMERS in all parts of the country have found this tool to be "right" in every way and it has always been very popular. It is extensively used in cultivating sugar beets. The teeth are steel, diamond shaped, with a small cultivator point forged on one end. They are adjustable for depth and angle. For very close work, every other tooth (or as many as you please) can be quickly removed.

With lever expander as shown in Fig. 106, cultivates 34 inches wide and closes to 11 inches. With plain expander, cultivates 38 inches wide.

No. 2 Iron Age Diamond Tooth Harrow. Same as

the No. 1 except it has 13 double-end teeth as in Fig. 87, in place of those shown in Fig. 106. This gives two cultivator points, an economy for those who do not care for the adjustments of the teeth on No. 1.



Fig. 87

Sweep attachment, Fig. 86. A wide flat sweep on a high arched, adjustable standard, to be attached to rear end of middle bar. Sure death to weeds and grass. Fits either No. 1 or No. 2.

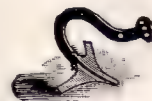


Fig. 86

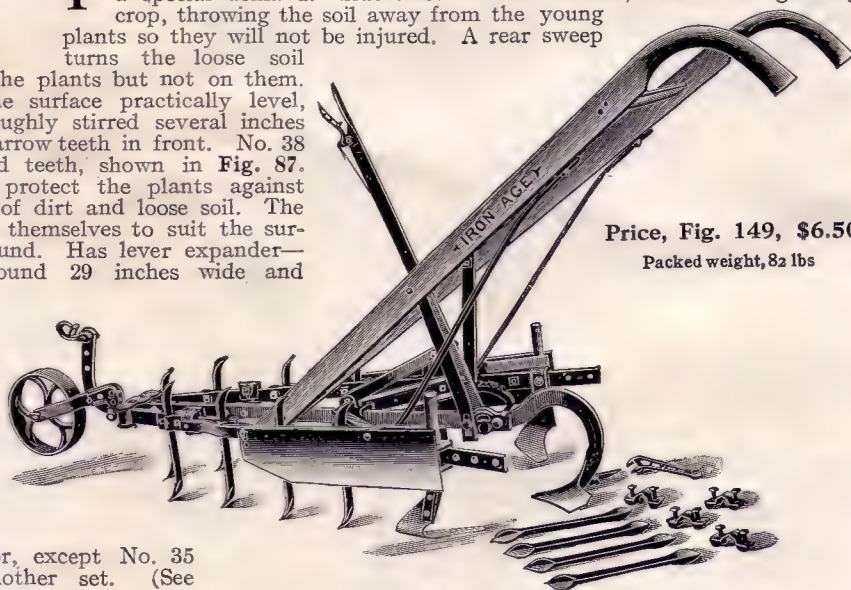
Price, \$.95

No. 38 Weeder and Harrow

FOR deep, thorough, level cultivation of sugar beets—built to meet a special demand. Side hoes cut the surface, close to the growing crop, throwing the soil away from the young plants so they will not be injured. A rear sweep turns the loose soil

back toward the plants but not on them. This leaves the surface practically level, although thoroughly stirred several inches deep by the harrow teeth in front. No. 38 has double-end teeth, shown in Fig. 87. Steel fenders protect the plants against stones, lumps of dirt and loose soil. The fenders adjust themselves to suit the surface of the ground. Has lever expander—will work ground 29 inches wide and close up to 14 inches.

The Special Side Hoes on this tool are furnished as an attachment, (Fig. 212 on page 24) for any Iron Age Horse Hoe and Cultivator, except No. 35 which has another set. (See Fig. 211, page 27.)



Price, Fig. 149, \$6.50

Packed weight, 82 lbs

Fig. 149

IRON AGE

Level, Shallow, Frequent Cultivation



EVERY farmer knows that he cannot depend entirely on rain in the growing season, for the moisture necessary for proper growth of his crops. Every farmer knows that hilled crops dry out much faster than those having level cultivation. Most farmers are coming to realize that shallow, level, frequent cultivation does two things: it keeps the moisture in the soil around the roots for a much longer time than with hilled crops, and it puts the top layer of two or three inches of soil in condition to give the most plant food. It is an established fact that it is from this top two or three inches that the plants get most of their growth. It follows that that much of the soil should have extra good care—should be kept always fine, loose, level. This makes a dust mulch which serves in Nature's best way—prevents loss of the deep soil water—protects plant roots from sun or frost and the necessarily frequent cultivation keeps the weeds down. This dust mulch greatly benefits any growing crop, but most of all corn, which has the most vegetation and the least time to grow in. Corn must not be tilled deeper than three inches, or the roots will be disturbed and the plant injured.

Many farmers from all parts of the country tell us that this method is growing rapidly in favor as they find out what it does. In some sections, nearly all are for shallow, level culture. But, for all these favorable reports, there is great chance for improvement. Government reports for 1909 show an average corn yield of 27.6 bushels per acre. In the various states, the average runs all the way from 13.5 in Alabama to 40 in Indiana. 40 bushels is not a big crop in certain sections but what a fine average it would make. The big average crops of corn are in the Middle West where they have more shallow, level cultivation than in all other sections.

Actual tests at seventeen experimental stations prove that shallow, level, frequent cultivation has produced an increase of 42% over deep cultivation. Does it not pay? **Iron Age** Riding Cultivators have every necessary convenience and adjustment for getting just the cultivation your crop needs. We make a large line with many attachments to meet conditions in every part of the country. They can be used from early growth until the plants get so tall that the machine will not ride over them. They can be used in wide and narrow rows, and can be adjusted to suit varying widths in the same long row.

The following pages will give you some practical details.

No. 82 Pivot Wheel Riding Cultivator

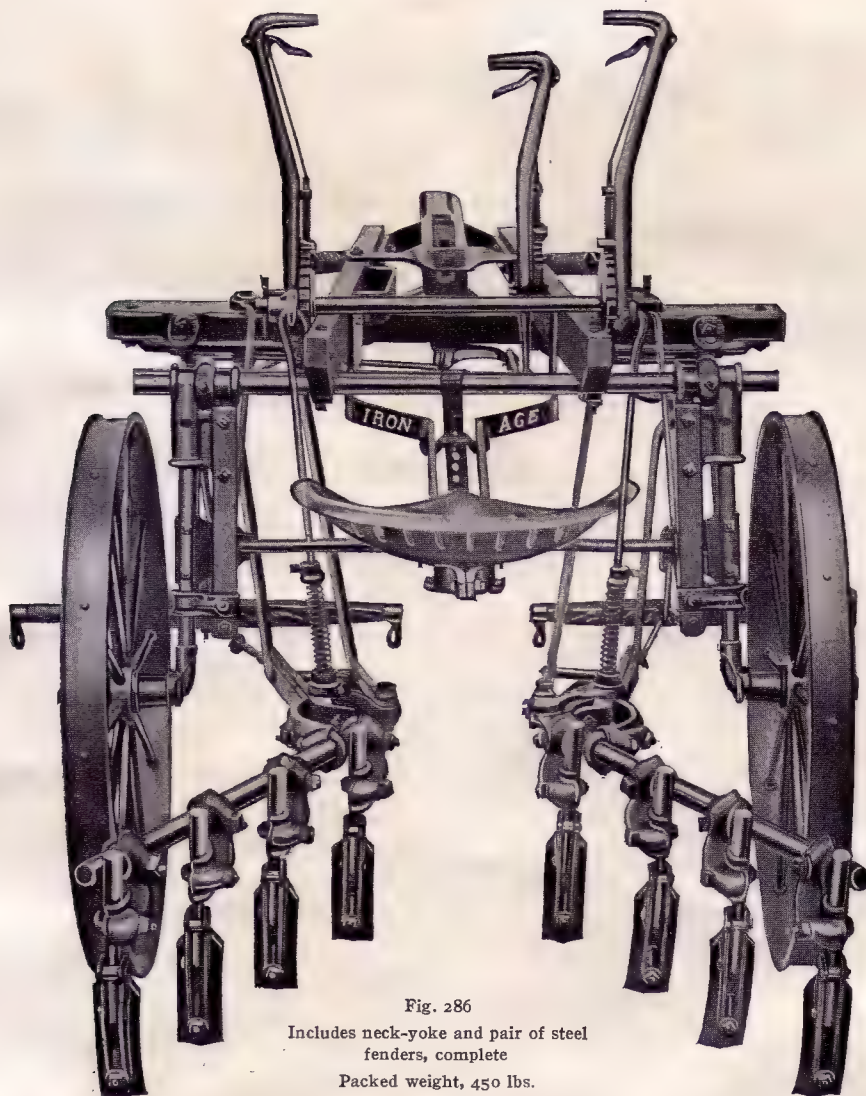


Fig. 286

Includes neck-yoke and pair of steel fenders, complete

Packed weight, 450 lbs.

No. 82. Grooved Bar Gang, Fig. 286 . . .	\$32.00	No. 84A. With Spring Teeth, Fig. 245 . . .	\$29.00
No. 83. With Flat Bar 8-Hoe Gang Shown in Fig. 287 . . .	31.00	No. 86A. With Spring Teeth, Fig. 245 . . .	30.00
No. 84. With Flat Bar 6-Hoe Gang Shown in Fig. 288 . . .	30.00	No. 82B. With Spring Hoes, Fig. 281 . . .	37.00
No. 86. With Flat Bar 8-Hoe Zigzag Gang shown in Fig. 289 . . .	31.00	No. 83B. With Spring Hoes, Fig. 281 . . .	36.00
No. 82A. With Spring Teeth, Fig. 244 . . .	31.00	No. 84B. With Spring Hoes, Fig. 281 . . .	33.75
No. 83A. With Spring Teeth, Fig. 245 (p. 34) . . .	30.00	No. 86B. With Spring Hoes, Fig. 281 . . .	36.00
		Extra Spring Hoes	1.25

IRON AGE

No. 82 Pivot Wheel Riding Cultivator



Fig. 287
Gangs for No. 83



Fig. 288
Gangs for No. 84



Fig. 289
Gangs for No. 86



Fig. 324
Break-pin hoe

THE leading low wheel riding cultivator, one that every truck gardener and general farmer appreciates—one that every farmer's boy of working age can operate—one that can be easily set for use in a wide variety of crops. It is several machines in one. Is furnished regular with break-pin hoes (Fig. 324) or when ordered, with spring hoes (Fig. 281) or spring teeth (Fig. 244.) You also have a choice from three additional gangs, Nos. 83, 84 and 86 in place of the grooved bar gang on No. 82. Nos. 83, 84 and 86 are sold as complete cultivators, the only difference being in the gangs—they are not pivoted gangs like the No. 82, but are rigid and made of flat steel bars similar to our No. 60 Cultivator. The farmer can purchase any of these gangs extra and use the different styles on the No. 82.

The pivoted gangs of No. 82 are hinged as in Fig. 321 and the cultivating width can be changed by simply loosening two bolts and shifting the gangs to the desired position. The tooth bars are round steel and grooved so that tooth holders

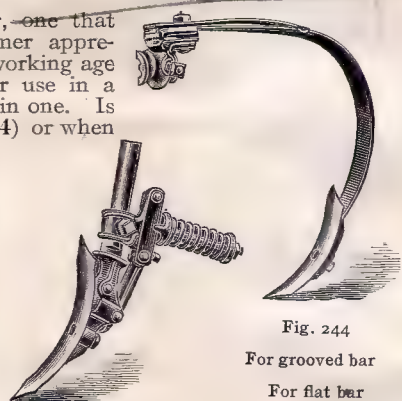


Fig. 244
For grooved bar
For flat bar
see page 34

Fig. 281. Price \$1.25

can be readily moved back and forth, or taken off in narrow rows, if thought necessary. With this construction the full number of teeth can be operated and get better results by using narrow points furnished as extras when ordered. More teeth can be added, also. By moving your points and adjusting the hinged bars, you get the thorough cultivation you need and yet keep the soil level.

The tooth standards are solid steel bars and held in position by eye bolts that clamp them to the bar. Each can be adjusted separately for depth or angle, or removed by loosening one nut. They can be set to cut shallow next the row and deep in the middle, or to throw to or from the plants.

The cultivator points sent with new machines are 2½ inches wide but we can furnish them 1¼ and 3½ inches wide, when ordered. (See inside back cover.)

The wheels are pivoted and the operator can guide the machine in this way with his feet, a decided advantage on hill sides, or for economizing space at ends of rows. Hardened steel ball bearings carry the weight of the tool (Fig. 322). With the pivots close to the center of the wheels, they are easily guided. The No. 82 has a steel axle in one piece—cannot get loose.

When working the cultivator in fallow ground or drawing it to the field, the wheels can be fixed in position by simply dropping a pin in a hole in the gang connecting bar. The wheels are 32 inches high with 2½-inch channel tires. They can be adjusted from 32 to 42 inches, allowing entire cultivation of rows 54 inches apart, or at any distance down to 28 inches or even narrower.



Fig. 321

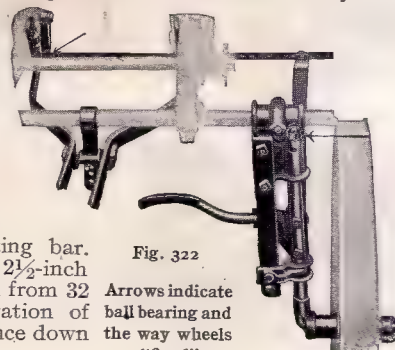


Fig. 322

Arrows indicate
ball bearing and
the way wheels
are "fixed"

No. 82 Pivot Wheel Riding Cultivator—Continued



No. 82 in Potatoes



With Ridging attachment

Spring Lift. Powerful springs help in lifting the gangs—a small boy can do it easily. **Tension springs are locked down** to hold the teeth to their work but springs are not so strong that the gangs cannot lift before they are damaged by obstructions.

Gangs are adjusted by a lever in front, in easy reach of the operator. It is often desirable to plant two or more crops in the same row. They may be same width apart but of different growth, say potatoes and corn. For cultivating the potatoes, the gangs must be set wide and for the corn in the other end of the row, they should be closed up to get near the crop. The lever makes these changes while the team is moving. Without quick adjustment by lever, extra room is needed for turning, and one crop or the other must suffer. The gang lever saves time even where but one crop is planted or a succession crop. The teeth are always squarely to the front as the gangs move parallel with each other—no soil is thrown to ridge a crop when gangs are set wide or taken away from the crop when set close. These faults cannot be avoided where gangs pivot in front.

The seat support can be adjusted for height and angle. (See Fig. 322.) A nice balance for light or heavy men is kept by means of a little adjustment of the forward end of the pivot stay brace.

There is direct draft as the horses draw from each gang. A steel evener is used and the pole can be adjusted for height.

Attachments

Plows shown in Fig. 117 are used for hilling crops or covering. They are made to fit all riding cultivators with break pin or spring hoes. For cultivators with spring teeth, special standards and holders will be needed (specify number and style of machine).

Fallow Tooth attachments are applied between the gangs when the cultivator is used in

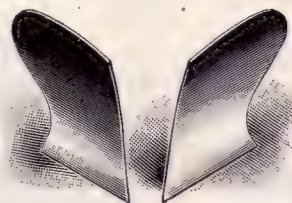


Fig. 117. Per pair, \$0.75
For Spring Teeth, per pair, \$2.25

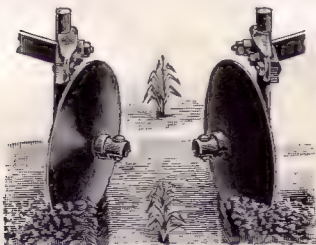


Fig. 118

Nos. 1, 3 and 4, \$3.50 No. 2 \$3.00



Fig. 140,
Price, \$1.15
With Spring Hoe
\$1.65

style of machine. Fig. 140 shows one for No. 82.

Disc attachment. Fig. 118. Is used for ridging, for turning the soil from growing plants and for covering. It is a very popular addition to the Riders—will fit all except Nos. 50, 51 and 52, but we will have to know for which cultivator the attachment is wanted. Nos. 60, 61, 83, 84, 86, 130 and 131 take No. 1 attachment. No. 82 uses No. 2 attachment. Spring tooth cultivators, except No. 82A, take No. 3, and No. 82A uses No. 4.

IRON AGE

Attachments for Riding Cultivator—Continued



Fig. 261. Price, per pair, \$1.00

Double Row Extension. Fig. 147. For cultivating at one time two rows of beans, potatoes and other crops planted equally close. The team straddles one row and this attachment cultivates close to the next row on each side—in other words you cultivate all of the two middles in rows up to 33 inches wide. Does not leave open furrows next to the crop, as the extra outside tooth is ahead of the rear tooth on the regular gang. Also valuable for fallow work and cultivating very wide rows, up to 65 inches apart. Used on No. 82 only. Can be furnished with spring tooth when so ordered.

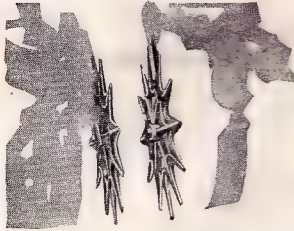


Fig. 285

Solid part shows star fender attachment. Price, \$1.00

fellow sits behind to operate independent gangs in tobacco and other crops where it is desirable to work close to the plants and between the hills, get perfectly level cultivation and keep weeds out. Each of these independent gangs has three narrow, reversible diamond-shaped teeth (Fig. 87, page 28) with cultivator tooth forged on one end and harrow tooth on the other. One or more teeth can be taken off—trashy soil may make it necessary to use but two. Each gang pivots in front and tension springs keep them in the ground—gangs are raised easily at ends of rows. The attachment is constructed so that the front inside cultivator teeth can be set forward where they break up the soil ahead of the narrow teeth—heretofore they could not be used at all. Can be applied to No. 82 Riding Cultivator but it is necessary to specify kind of machine in each case.

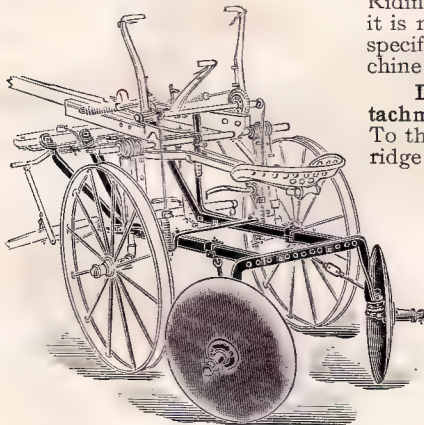


Fig. 284

Solid parts show disc ridging attachment on No. 82 Price, attachment only, \$10.00

Hilling attachment. Fig. 261. These shovels are the same as used on Iron Age Horse Hoes and are used on all riding cultivators with entire satisfaction. They will hill crops, take away soil from the plants, and cover furrows.

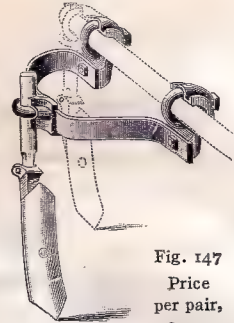


Fig. 147
Price
per pair,
\$3.25

Star Fender attachment. Fig. 285. To meet the demand in certain localities. Can be used and will be furnished, when ordered, without extra charge on any Riding Cultivator in place of the regular sheet steel fenders which are furnished with every machine sent out.

Tobacco attachment. Fig. 283 shows it applied on No. 60; takes two to work it, one on the upper seat to drive and the other

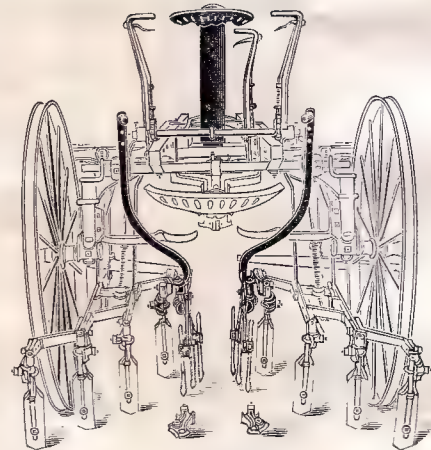


Fig. 283

Solid parts show tobacco attachment applied to No. 60 Price, attachment only, for Nos. 82 or 60, \$5.00

Disc Ridging attachment. Fig. 284.

To throw up a higher ridge than is possible by the use of plows or regular disc attachments. It is simply a larger and stronger

equipment than the disc attachment. It is applied in place of the cultivating gangs—has 20 inch discs, adjustable for depth, width of ridge and angle at which they are set. This attachment is especially valuable in that part of New England where high ridging of potatoes is practiced. Is made for No. 82 but can be furnished for Nos. 83 and 84, when ordered.

No. 60 Pivot Wheel Riding Cultivator

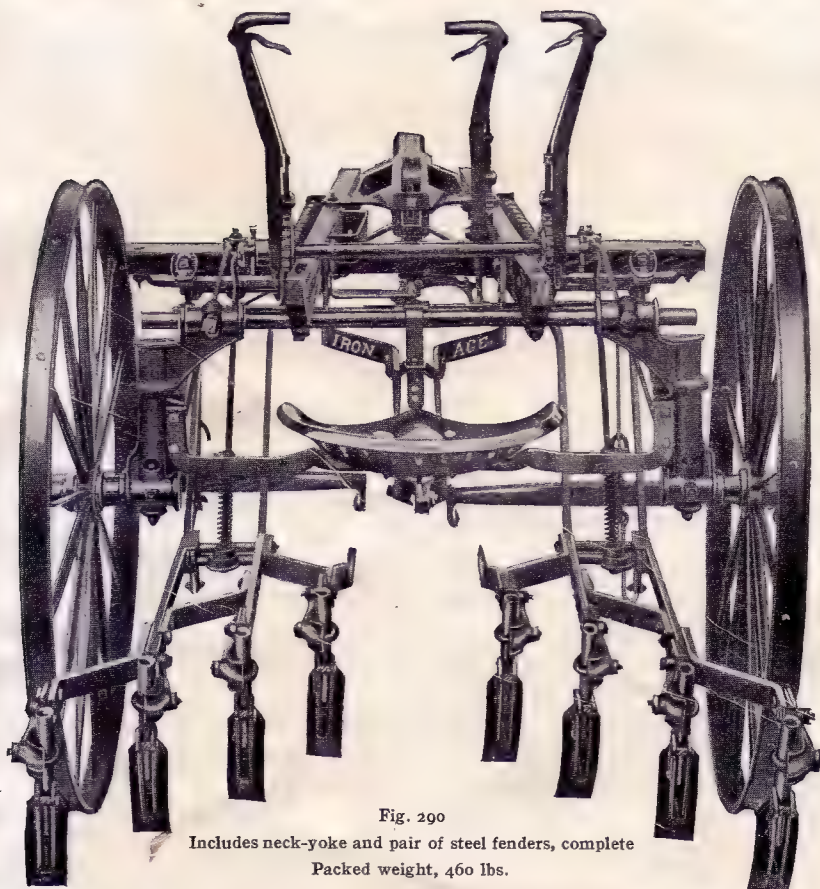


Fig. 290

Includes neck-yoke and pair of steel fenders, complete
Packed weight, 460 lbs.

No. 60. With Spring Pressure Lock-Down Fig. 290	\$34.00
No. 61. With Chain Lift in place of Lock-Down	33.00
No. 62. With 6-Hoe Gang and Lock-Down	32.00
No. 60A. With Spring Teeth, Fig. 245	33.00

No. 61A. With Spring Teeth, Fig. 245	\$32.00
No. 62A. With Spring Teeth, Fig. 245	31.00
No. 60B. With Spring Hoes, Fig. 281	39.00
No. 61B. With Spring Hoes, Fig. 281	38.00
No. 62B. With Spring Hoes, Fig. 281	35.75
Extra Spring Hoes	1.25

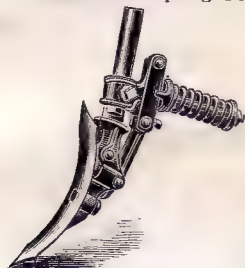


Fig. 281
Price, \$1.25

A HIGH wheel machine—wheels are steel, 42 inches high with channel tire to prevent slipping on hillsides. They can be set 50 inches wide or closed to 39.

A pivot wheel machine. Fig. 323. For cultivation on hillsides, for work in very crooked or irregular rows, or for saving space for turning at ends of rows, the pivot wheel cultivator has decidedly the best of any other style. The operator guides the machine by his feet, swinging the gangs of teeth with the wheels to right or left. In turning at the ends, swing the wheels away from the team and the machine will be carried



Fig. 245
For flat bar

IRON AGE

No. 60 Riding Cultivator—Continued

quickly into position to cultivate the return row. If you have never used a pivot wheel machine, try it at first with a slow steady team. Hardened steel ball bearings carry the weight of the tool (Fig. 323), the pivots are close to the center of the wheels and they are easily guided. The wheels are fixed in position by a thumb screw on the gang connecting bars (Fig. 323)—this is necessary in fallow work or when on the road.

The gangs are made of flat steel bars and put together in such manner as to give the greatest possible strength—they are rigid and cannot give in the guiding or working. For cultivating potatoes and other close grown crops, the outside section of each gang is removed, giving you a six tooth machine or the section next to row can be taken off.

Tooth standards are solid steel bars. Eye bolts hold the standards securely in place and each can be adjusted separately for depth or angle, or removed by loosening one nut. Teeth can be set to throw the soil to or from the crop, if desired, or, in small plants, they can be set to cut shallow next the row and deep in the middle space.

The cultivator points sent out regular with new machines are $2\frac{1}{2}$ inches wide and 10 inches long but we can furnish them $1\frac{1}{4}$ and $3\frac{1}{2}$ inches wide. (See list on inside back cover.)

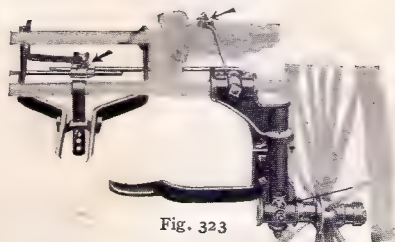
The gang lever. Whether you cultivate one big crop or a succession crop with plants of different growths, or a variety of crops where the width of rows changes often, the adjuster lever changes the distance between the gangs instantly. This can be done while the team is in motion. Gangs are shifted in parallel lines and are always an equal distance from the center—teeth are always facing the same way and do not throw soil toward the plants when expanded and away when closed up.

Spring lift. Powerful springs help in lifting the gangs—a small boy can do it easily. Both gangs can be raised with one lever by putting steel pins through lever and shaft. Tension springs are locked-down to hold the teeth to their work but springs are not so strong that the gangs will not lift before they are damaged by obstructions. By loosening a small collar, pressure is released and the gangs can "float" if desired.

No. 60 has short, straight, steel axles, each held in place by one bolt—cheaply and easily replaced when worn.

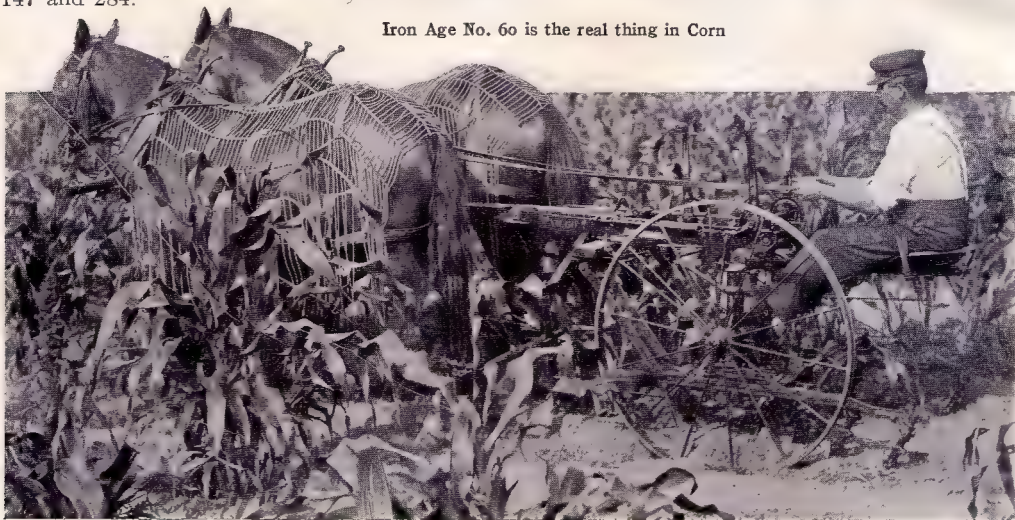
The seat support is adjustable in height and angle. (See Fig. 323). As on No. 82, a nice balance for light and heavy men is kept by means of a little adjustment of forward end of the pivot stay brace. The horses draw directly from each gang, a steel evener is used and pole can be adjusted for height.

Attachments. All of those shown on pages 32 and 33 are used on No. 60 Rider, except Figs. 147 and 284.



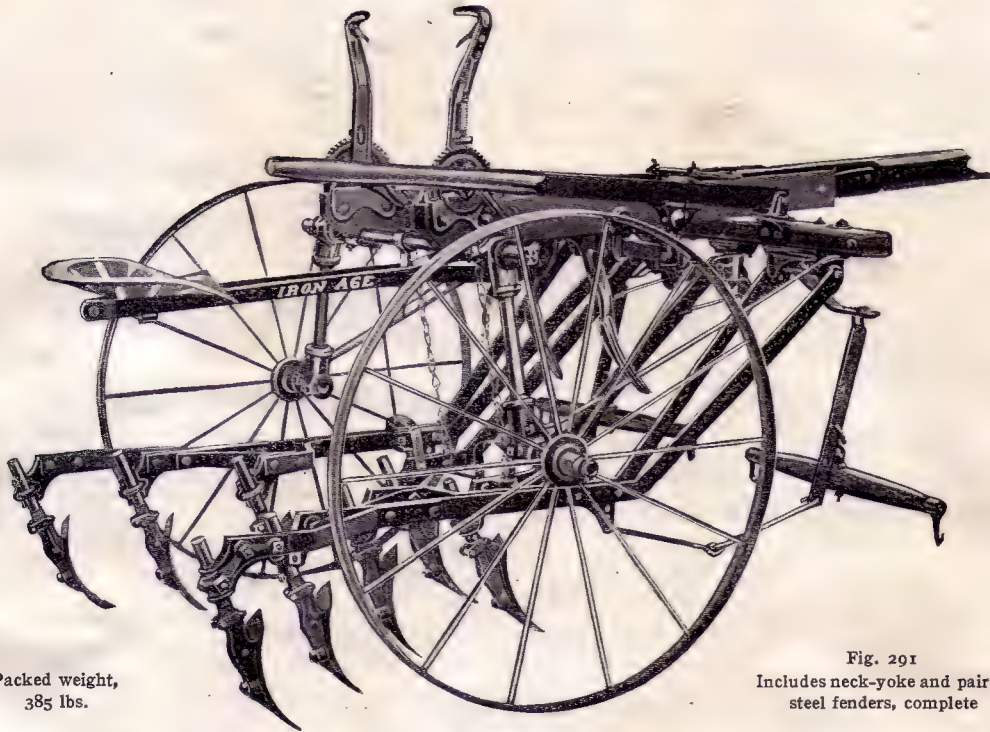
Arrows indicate ball bearing, adjustment of pivot brace and the way wheels are fixed

Iron Age No. 60 is the real thing in Corn



IRON AGE

No. 50 Fixed Wheel Riding Cultivator



Packed weight,
385 lbs.

Fig. 291
Includes neck-yoke and pair of
steel fenders, complete

No. 50. With Chain Lift, Fig. 291	\$30.00	No. 50B. With Spring Hoes	\$35.00
No. 51. With Lock-Down	32.00	No. 51B. With Spring Hoes	37.00
No. 52. Without Side Lever and Yoke	29.00	No. 52B. With Spring Hoes	34.00
No. 53. With Chain Lift and High Wheels	31.50	No. 53B. With Spring Hoes	36.50
No. 54. (No. 52 With High Wheels)	30.50	No. 54B. With Spring Hoes	35.50
		Extra Spring Hoes	1.25

B EING a fixed wheel cultivator, it is intended for use on level or slightly rolling ground. Under these conditions, market gardeners will find No. 50 to be a thoroughly practical and easily operated machine. It is furnished in a variety of equipment to suit each man's need.

For this year, No. 50 will be furnished with the regular 36 inch steel wheel, or 42 inch steel wheel with channel rim as used on No. 60. When the high wheels are wanted, order No. 53, (Fig. 292) or No. 54 which corresponds to No. 52, except has high wheels and short arches. The wheels are adjustable from 52 inches wide to 39 and the gangs can be set to work rows at any width between those two marks.

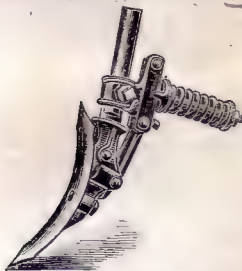


Fig. 281. Price, \$1.25

The gangs are made of flat steel bars and put together in such manner as to give greatest strength and remain rigid. The outside gangs are fixed in front and securely braced—are adjustable in slots in the cross bar to suit the various width rows. The rear outside section of each gang can be removed—it is sometimes necessary to work with six hoes in narrow rows.

The old way of guiding gangs was by the feet and hard, unsatisfactory work—took away all the pleasure there was in having a riding cultivator. The No. 50 way is to have a patent—

Gang lever. This is a valuable arrangement that does away, almost entirely, with the guiding of gangs by the feet. Shifting the lever to right or left works the independent teeth around the misplaced hills or bushy

IRON AGE

No. 50 Fixed Wheel Riding Cultivator—Continued



Eleven No. 50 Cultivators at work in Peas

plants, and depressing the lever brings the independent teeth together between the hills, cultivating all the space and close to the plants. This is not attempted on any other Rider and many truck gardeners want just this sort of a machine for exact work among small plants. The independent gangs have foot loops which can be used where both hands are needed for driving, as at ends of rows or with unsteady team, or when machine is used without the side lever and yoke that controls the independent gangs.

A chain lift raises and carries the gangs at the proper height. Ordinarily the feet give any extra pressure on the gangs that may be needed. We furnish, when ordered—

Spring pressure lock-down, like those on Nos. 82 and 60, to hold the teeth in the ground with as much pressure as needed, but the pressure is not strong enough to hold the teeth until they break, when they strike an obstruction.

The tooth standards are the same as used on Nos. 82 and 60 cultivators and have the same adjustments for depth and angle. This cultivator cannot be equipped with spring teeth.

The cultivator points sent out with new machines are $2\frac{1}{2}$ inches wide but we can furnish, when ordered, points $1\frac{1}{4}$ and $3\frac{1}{2}$ inches wide. (See list on inside back cover.) All points are made of best grade of hoe steel and upset at back of the points to give more wear.

The seat support is adjustable in height and angle. A steel evener is used and the draft is direct from each gang.

Attachments. No. 50 takes Figs. 117, 140, 261 and 285 shown on pages 32 and 33.

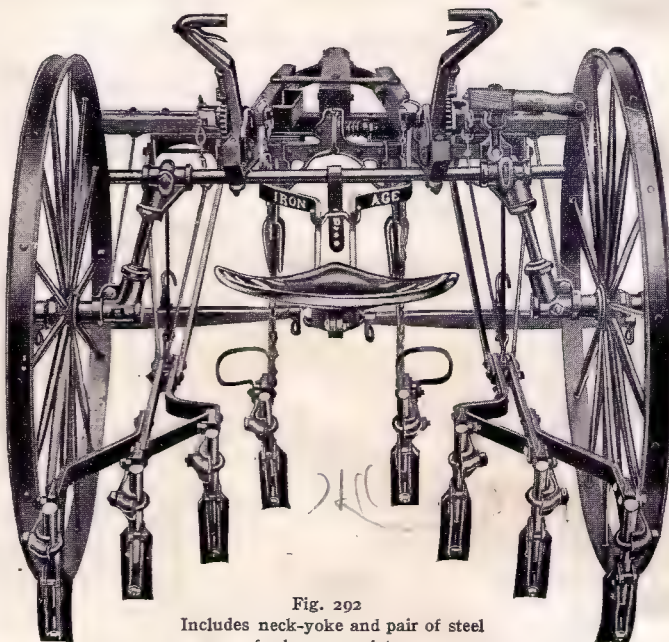


Fig. 292

Includes neck-yoke and pair of steel fenders, complete.

No. 53. With high wheels and short arches. Packed weight, 395 lbs.

IRON AGE

No. 130 Fixed Wheel Riding Cultivator

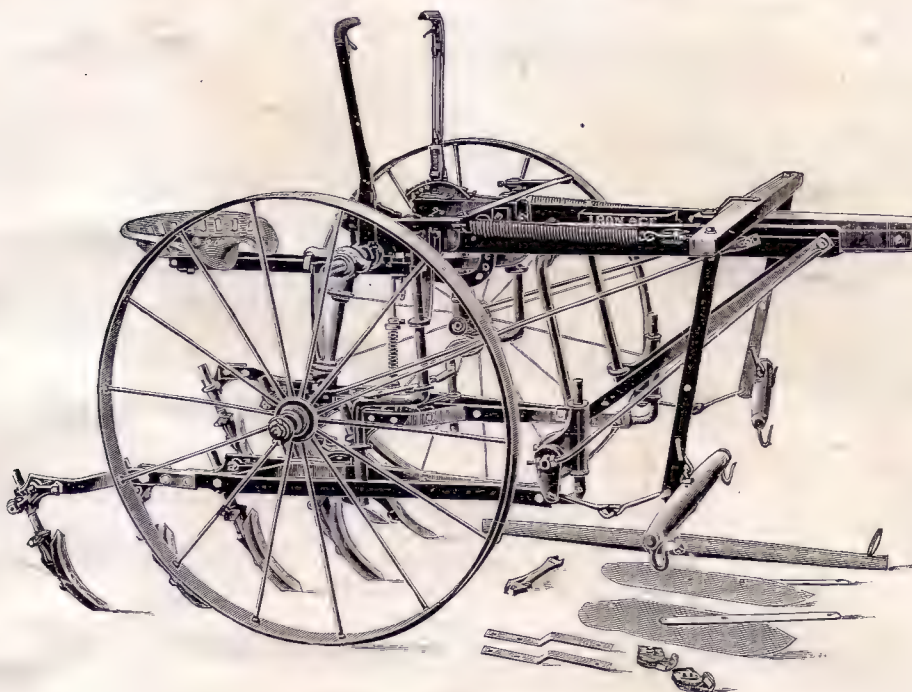


Fig. 230. Packed weight, 450 lbs.

No. 130. Fig. 230	\$30.00
No. 131. 6-Hoe Gang	28.00
No. 130A. With Spring Teeth, Fig. 245	29.00
No. 131A. With Spring Teeth	27.00

No. 130B. With Spring Hoes, Fig. 281	\$35.00
No. 131B. With Spring Hoes	31.75
Extra Spring Hoes	1.25

It is a fixed wheel machine with pivot gangs built to meet the needs of certain trade. It is not adapted for cultivation of crops planted in rows less than 36 inches apart.

The gangs are made of flat steel bars and well put together—always rigid under pressure. They swing on pivots and are operated by the feet. Are leveled by quick adjustment. The working width of the gangs can be changed on the arch of the frame by thumb latch on the gang adjuster (jockey arch), located between the stub poles. The tooth standards are same as used on the other Riders and can be adjusted for depth and angle, to suit your needs. Powerful springs assist the levers in lifting the gangs and pressure springs lock the teeth down and hold them in the ground. The pressure is not strong enough to hold the gangs so teeth will break when they strike an obstruction.

The wheels are steel, 42 inches high, with channel tires and two inch tread—same as used on No. 60. Can be adjusted to suit the rows.

The seat support can be adjusted for height and angle. The horses draw direct from each gang.

Attachments. No. 130 takes all of those shown on pages 32 and 33, except Figs. 147, 283, 284.

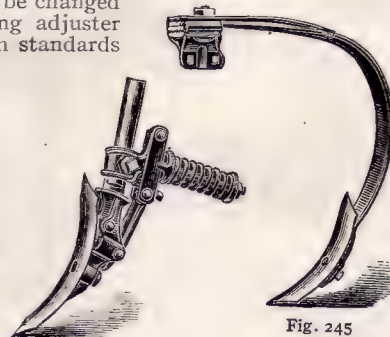


Fig. 281
Price, \$1.25

Fig. 245

IRON AGE

No. 140 Combined Double- and Single-Row Riding Cultivator

DESIGNED to cultivate two rows in one operation although the spaces may be irregular in width. The rows may be planted any width from 28 to 44 inches apart.

Either two rows or one. The combination feature in this tool is very important. Hillside work or hard, baked ground and first time through, often makes it necessary to operate as a one row machine—saves draft, and you get around easier. The change to either form is made easily and quickly—simply remove the outside sections.

The gangs. The inside sections are practically the same as on No. 82 with grooved bars. The outside bars are flat steel but the tooth standard blocks can be shifted and more teeth added to the bars, or one or more can be removed for work in narrow rows. The outside bars carry three teeth but we hinge the bars between the second and third—it is easier to shift this front section only. The third outside tooth can be adjusted to suit clear or trashy conditions. No crops will be knocked down in turning at the ends of the rows. Outside gangs are attached to main cross bar with a front arch—simple, strong and rigid.

A center lever adjusts the inside gangs and an extra lever shifts the outside sections. You can cultivate as close to the plants as you please.

The same tooth standards are used as on the other Riders—they can be adjusted for depth and angle. The regular teeth are $2\frac{1}{2}$ inches wide but we recommend $1\frac{1}{4}$ inch for small plants and in narrow rows.

The machine is pivot wheel construction and operated in the same manner as Nos. 82 and 60. The steel wheels are 32 inches high and adjustable for width.

Attachments. No. 140 takes Figs. 117, 118, 140, 261, shown on pages 32 and 33. In ordering, please specify that they are wanted for No. 140.



Cultivating two rows at once

No. 140, Fig. 282 - \$50.00

Packed weight, 625 lbs.

No. 140A, with spring

teeth - - - - 48.00

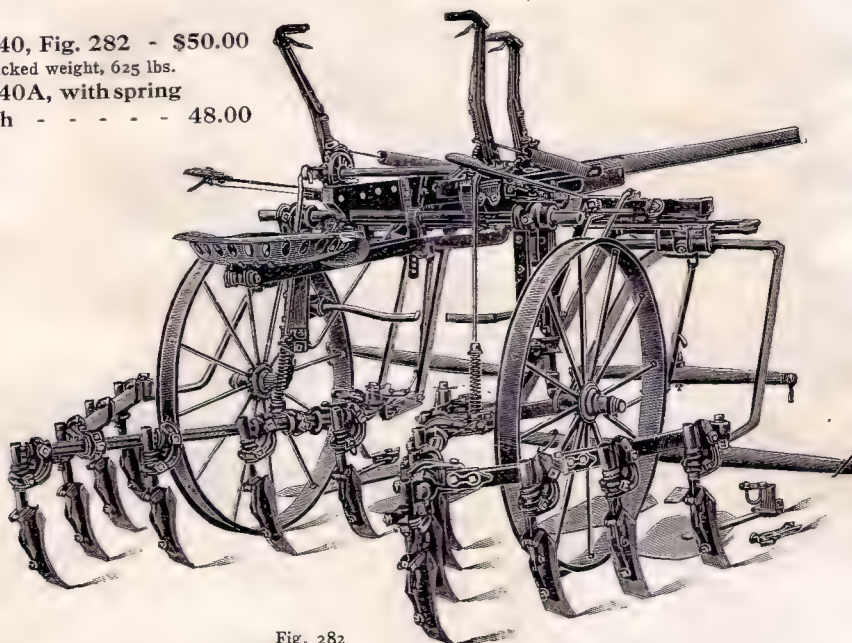


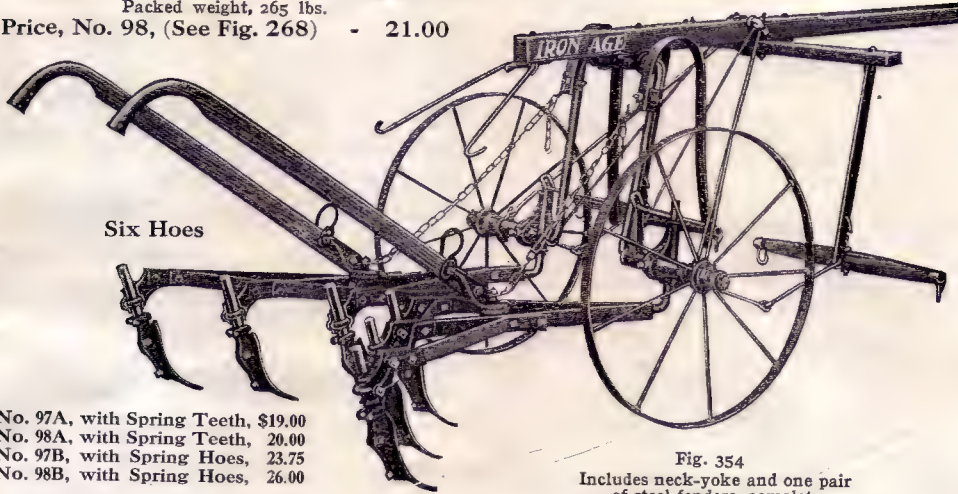
Fig. 282

Two-Horse Walking Cultivator

Price, No. 97, Fig. 354 - - \$20.00

Packed weight, 265 lbs.

Price, No. 98, (See Fig. 268) - 21.00



Six Hoes

- No. 97A, with Spring Teeth, \$19.00
- No. 98A, with Spring Teeth, 20.00
- No. 97B, with Spring Hoes, 23.75
- No. 98B, with Spring Hoes, 26.00

Fig. 354
Includes neck-yoke and one pair
of steel fenders, complete

ON steep hillsides, on very rough, stony or stumpy ground, it will be found necessary, in most cases, to use a walking cultivator. Many farmers want a lower priced machine than the Riding Cultivators. We have what they want—a first-class tool in every respect.

This season we make only flat bar walking cultivators with six hoes No. 97 (Fig. 354), and with eight hoes No. 98 (Fig. 268). The gang bars are flat steel, securely braced. Standards are the same as on Riding Cultivators—with break pin hoes as the regular equipment. Spring teeth and spring hoes are furnished when ordered. The standards are adjustable for depth and angle, and teeth give special wear, because they are upset just back of the points. Gangs can be set to cultivate rows from 36 to 42 inches apart, adjustment being made at the head.

A spring lift helps the man at the handles to balance the gangs

easily and quickly—the springs are flat steel, curved at the top and connected at the gang heads by straps—these adjust the tension which is easily changed by lifting gang from the ground and moving the spring key to the desired hole.

Every time you turn the end of a row, you will appreciate the help of these springs. When on the road, the gangs are hung up on hooks at end of pole.

Cultivating depth is regulated by taking up or letting out chains, and by pressure on the handles. The latter can be adjusted at any angle.

The wheels are steel, 30 inch, with 1½ inch tires. They run on steel axles, which also form the gang heads and arches on each side.

Attachments. Figs. 117, 118, 140, 261 and 285 on pages 32 and 33 can be used on these machines.

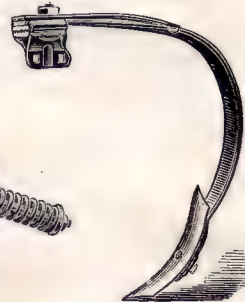


Fig. 245

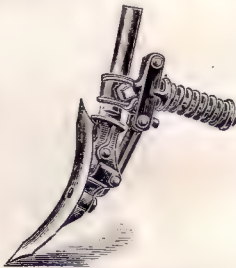


Fig. 281. Price, \$1.25



Fig. 268
Eight Hoe Gangs for No. 98

IRON AGE

Means Perfect Machine Planting



Planting 100%. Boy making necessary corrections only



An Ohio man planting onions

"It is hand-dropping, spaced with unerring accuracy by machinery."

THE above quotation from an article by Dr. W. I. Chamberlain in the Ohio Farmer tells just what every potato grower should have. Start right—it costs too much to cultivate, spray and dig your crop to allow any waste in planting. You cannot afford hand planting—it is too slow, too hard work and not perfect. Even if you put in a few acres only, you will find that perfect machine planting pays big. You want to do your work in season and do it quickly. You want straight, even-spaced rows, for proper cultivation—you want every piece of seed to count, for seed is usually high and scarce these days. The farmer may think that his potato planter should handle tender, uneven potato seed as perfectly as the corn planter does its work with the hard seed. He will expect too much, for it is against Nature—can't be done. No potato machine can plant perfectly, without help—every miss, every wasted seed piece, every punctured piece means smaller yield per acre.

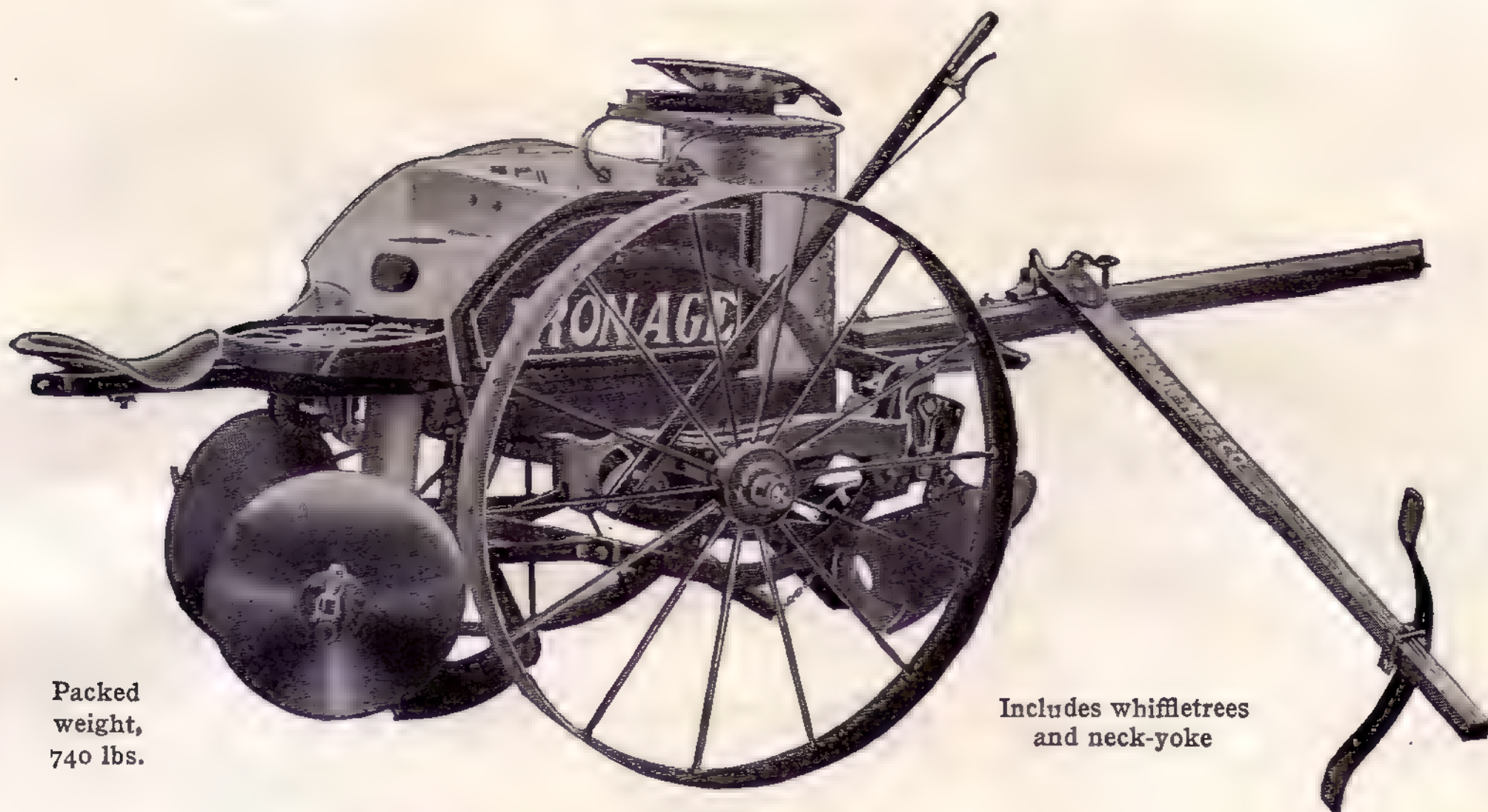
What does this piece of seed mean to you?



A small piece of tender seed that means a great deal

Depends on how you plant it, and how you take care of the crop in growing time and harvest. How many hills would you have to miss before your profit would be gone? How long would it take to lose the price of a perfect planter in hills that were skipped by an imperfect machine? It is far less expensive to put a boy on the rear seat of an **Iron Age** (Improved-Robbins) Planter and make sure that every piece of seed goes into the ground. The **Iron Age** plants 100%—no misses, no doubles, accurate spacing and perfect placing—no injury to seed in any way. It saves its cost in a short time. One man says "all of the potatoes came up at once, regular and even—the **Iron Age** increased my yield 60 bushels per acre—did not use a hoe the whole season—could put in my vest pocket all the weeds on the ten acres—it does all you claim in the way of accurate planting and ease of taking care of the field." Can any one want more? If you have not used **Iron Age** potato machines, find some one who has, and you will soon know how high they stand with the farmer.

(Improved-Robbins) Potato Planter



Packed weight, 740 lbs.

Includes whiffletrees and neck-yoke

Fig. 293

No. 1. Fig. 293, with Distributor and Shield Plow	\$80.00
No. 2. Fig. 294, without Distributor, with Shield Plow	70.00
No. 3. With Distributor and Shield Plow	80.00
No. 4. Without Distributor, with Shield Plow	70.00

Nos. 3 and 4 are exactly like Nos. 1 and 2, except that they are fitted to plant large cut seed, not less than 4 ounces.

No. 1A means equipped with opening plow, Fig. 142, page 45, at same price.

No. 1B means equipped with opening plow, Fig. 218, page 45, at same price.

A LIGHT weight, light draft, strong, compact potato planter with a record of many years perfect planting such as none other can point to. In localities where they are used at all, they are used almost exclusively—as soon as a grower learns what the **Iron Age** has done for his neighbor, he wants one and gets it, if he speaks in time. Its perfect work is marked by four things especially—while it handles all the seed automatically from hopper to seed spout, it does not injure a single piece—although a boy is necessary to make corrections, the net profit to you is far greater than if you planted with any other machine—no matter what distance apart you want to put the seed, you can do it and be sure there is a piece in every space and one only—although you sow fertilizer at the same time, none of it touches the seed.

The **Iron Age** is furnished with fertilizer attachment (Fig. 293) or without it (Fig. 294). Also, with three different styles of furrow opening plows—the regular, with steel shield, is shown in Fig. 293. It is used to divide the soil for the plow and warns the driver when it strikes “fast” rock, to release the lever so the plow will pass over. The shield will prevent clogging in somewhat trashy ground but flat and concave discs are provided for extreme cases. (See Figs. 142 and 218 on page 45.) Each style of opening plow throws a loose furrow of soil with no packing to crowd growth of the crop. The fertilizer is spread just back of the plow. The latter can be set to cut deep or shallow.

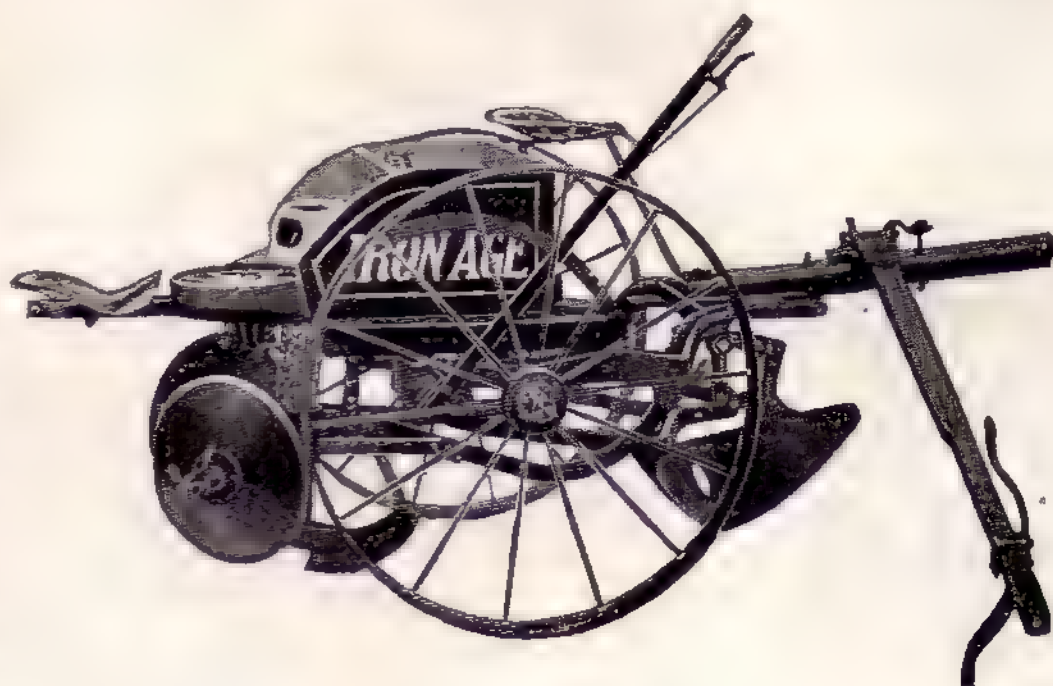


Fig. 294

Without fertilizer distributor. Packed weight, 670 lbs.

IRON AGE

(Improved-Robbins) Potato Planter—Continued

Dropping the seed. The most important part of a planter is the handling of the seed. Fig. 325 shows hopper where the seed is placed—the bottom is separate and cut out in the center—in operation, it is agitated from underneath—this shakes just enough seed through, under the wooden fenders, into the pockets of the elevator wheel which in turn drops it through a short spout to corresponding pockets of the feed wheel. No pickers are used and not one piece of seed is injured in handling. Up to this point all work is automatic, but now comes the boy's part—he sits at the rear and Fig. 186 shows him placing in a vacant pocket of the feed wheel, a

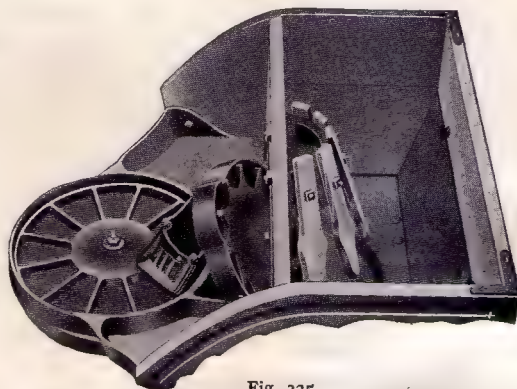


Fig. 325
Automatic movement of the seed from hopper to feed wheel, without injury

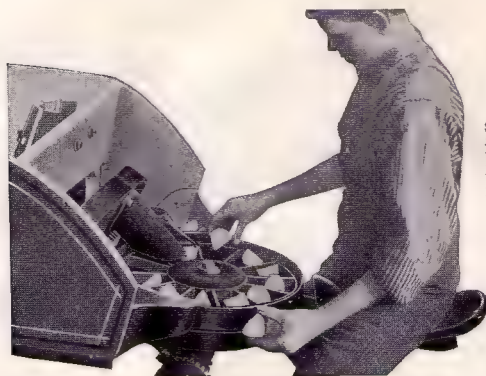


Fig. 186
Correcting "doubles and misses," earning big money for his employer.—All other work automatic

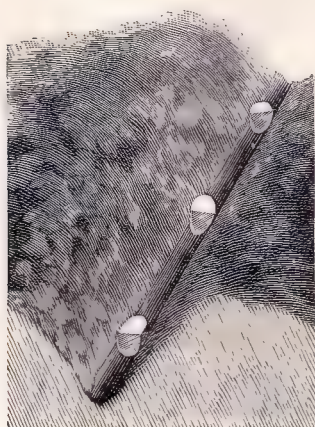


Fig. 187
Potatoes don't roll in this groove. Straight rows, even spacing

seed piece which had been delivered to the preceding pocket with another piece. In actual operation from 60% to 90% of the seed is dropped without necessity for the boy's corrections—this depends entirely on cutting of the seed—if uniform, the action of the Planter will be nearly perfect, the feeder's work easy, you will have a better stand and more uniform growth of plants—result, a larger crop. The feed wheel carries each seed piece over the tube and drops it in the groove in the furrow.

You know that every row and every space has seed in it—there

are no misses, no doubles, no trouble on hillsides. A sheet iron shield covers the elevator wheel. Fig. 326 shows the back end of the new style shoe which makes a small wedge-shaped groove, (Fig. 187) $\frac{3}{4}$ inch wide and 1 inch deep in the bottom of the furrow—the seed falls into this and stays there—cannot roll. This makes even spacing, in as straight a line as you drive and helps in the working of the crop. Fig. 326 also shows the covering discs, their adjustments for width, angle and depth and adjustment of the cast iron boot which protects the potato tube. As the boot also carries the shoe at the bottom you can regulate the depth at which it works, and plant deep or shallow. The discs ridge the crop in any shape you wish—they cover thoroughly from each side and you know the seed is in the center of the furrow—no "greened" potatoes after Iron Age planting and you can harrow after planting to get in shape for cultivation. A large number of growers practice level cultivation and do not ridge much but simply set the discs to cover with just enough soil. Close adjustments are necessary to get right results.

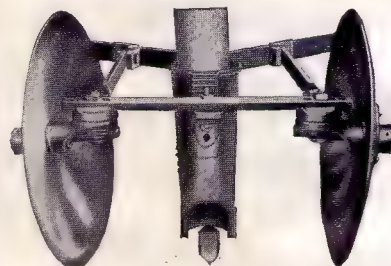


Fig. 326 Showing adjustment of discs and boot, also shoe for seed groove

(Improved-Robbins) Potato Planter—Continued

Seed and fertilizer. No injury is possible from seed coming in contact with the fertilizer. The arrows in Fig. 327 show shield and plow opening the furrow—show fan-shaped fertilizer spreader which throws a stream 6 or 8 inches wide across the bottom of the furrow—show where shoe, attached to potato tube, begins to cut groove for the seed and at the same time mixes the fertilizer with the soil—show where the seed drops. It goes into the groove below the fertilizer.

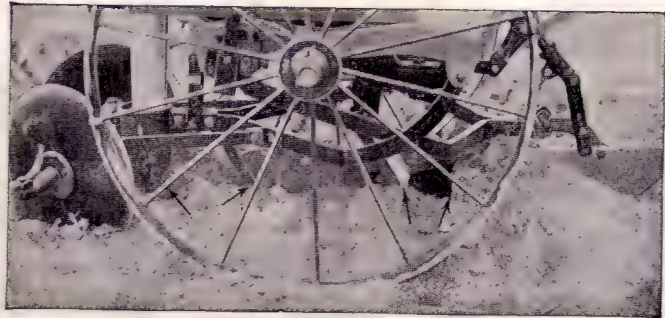


Fig. 327

Shield plow, fertilizer spreader, seed shoe, potato tube

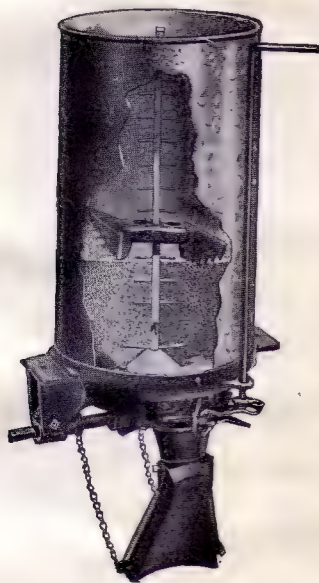


Fig. 328

Showing fertilizer distributor
See page 46

Fertilizer distributor. We are proud of it because it works perfectly and suits our customers. The hopper is galvanized iron and holds about 100 pounds. It will distribute up to a ton per acre, or even more, according to condition of the fertilizer. Fig. 328 shows how the fertilizer feeds to the cone in the bottom by a revolving agitator shaft with steel cross pins, and a winged scraper, placed on top of the fertilizer—**never underneath**. The scraper drops by its own weight as the material is fed away. The fertilizer falls on the cone, light and loose—the cone throws it out on a revolving disc—a feed wheel is forced around to the gate opening and carries the fertilizer into the spout and down the spreader. The gate regulates the amount of fertilizer to be sown, and saves waste when turning at ends of rows. The lever at the side operates the gate—the handle is directly under the seat and its movement is adjusted by a hinge casting and set screw.

Fertilizer feed wheel. With 1910 Fertilizers we send out feed wheel No. P-145A in place of No. P-145. The former will sow a smaller amount of fertilizer per acre, than the star wheel P-145 which we furnished before but this seems desirable to the majority of Iron Age planter men. We shall continue to furnish P-145 but as an attachment only. See Fig. 357 on page 46.

Elevator wheels. Fig. 329. To accommodate different sized seed, we furnish with each planter, three kinds of elevator wheels (including the one on the machine). On Nos. 1 and 2 Planters the one for small seed is No. P-180—medium, P-179, and large, P-181.

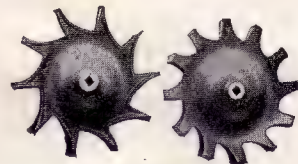


Fig. 329

When ordered, we will substitute either No. P-184 for still smaller seed or No. P-183 for larger seed, or both, for a like number of elevator wheels regularly furnished. On Nos. 3 and 4 Planters, the regular wheel for small seed is No. P-179—medium, P-88—large, P-87. Special for very small seed, No. P-180—for very large seed, P-86. The operator must tell by trial which wheel to use—if feeding too fast, use a wheel with smaller pockets, etc.

Distance spacing sprockets. Fig. 330. With each planter we send six different sprockets (including the one on the machine) which will space seed 12, 14, 15½, 17, 18½, or 20 inches apart. We can substitute for any of these when ordered, one that will space the seed 24 inches apart. Fig. 330 also shows three extra sprockets and extra chain links, to regulate feeding of fertilizer.

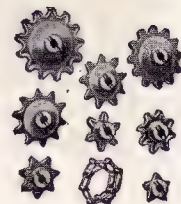


Fig. 330

(Improved-Robbins) Potato Planter—Continued

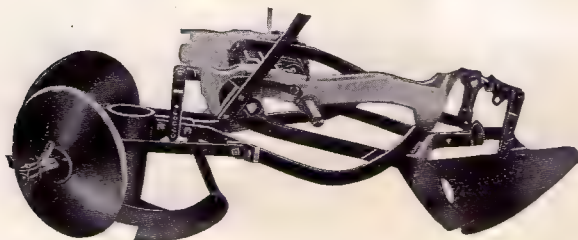


Fig. 331
One lever stops potato and fertilizer feed. Also raises entire gang

steel rims, slightly concave, and removable ratchet hubs which are cheaply replaced when worn.

Other kinds of work. You can mark and furrow for cabbage, sow the phosphate, and hill perfectly and economically. The potato tube and shoe must be removed in such cases. While we do not make an outfit for sowing onions, we show on page 41, one man's use of the Planter for that purpose.

Attachments

Single disc opening plow. Fig. 142. For use in extremely trashy ground and long vines—a sharp disc does better work under these conditions than the shield plow and also gives the plow more chance to scour—this makes draft lighter. If wanted on new machine, order by adding letter "A" to the number, as No. 1A.



Fig. 218

Showing double disc opening plow
Price, attachment only, \$3.75

Double disc opening plow. Fig. 218. Where cow peas or heavy growth of other vegetable matter has been plowed under (as is common in the South), we recommend this style of opening plow and know that it will be appreciated. The planter will pass through the ground without interference in any way. If with new machine order by adding letter "B" to the number as No. 1B. Either of these plows can be furnished in place of shield plow or as attachments.

To sow corn, beans and peas, we furnish seed attachment, Fig. 267. When once set for sowing the proper amount of seed, you have simply to keep the can filled—the machine does the rest. Truckers use it from early spring to late summer for their succession of plantings. Dairymen sow corn for fodder in addition to preparation of rows for root crops.

It will sow corn, beans and peas in continuous rows or drop

corn and beans in hills at 12, 14, 15½, 17, 18½ or 20 inches apart. By using, on feed wheel shaft, one of the small extra fertilizer sprockets, Fig. 330, you can drop seed closer than 12 inches. The first section of Fig. 267 shows brush agitator which pushes extra seed away from the plate openings. The middle section shows the gate which regulates the flow of pea seed. We show set of five plates for sowing corn and beans, and one corrugated plate for sowing peas.



For corn and beans



For peas.
Gate open



Seed plates for corn,
beans, peas

Fig. 267. Price, attachment, complete, \$5.00

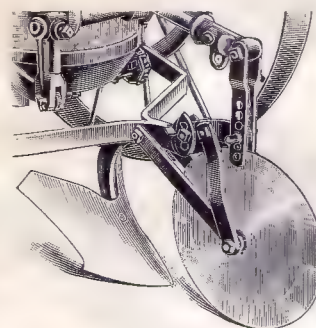


Fig. 142
Showing single disc plow
Price, attachment only, \$3.75

Attachments for (Improved-Robbins) Potato Planter

Double distance seed plates. Fig. 296. To take care of customers who want to drop seed farther apart than provided for in the regular seed attachment, we have made an extra set of seed plates to match the old ones except that alternate holes are filled or stopped up. They have just half the number of holes in each case and seed can be dropped at double the distance apart or 24, 28, 31, 34, 37 or 40 inches. Will be furnished in place of those in Fig. 267 on page 45, when so ordered, or extra at prices noted.

Leveling attachment. Fig. 295. For smoothing and leveling rows.

Fertilizer attachment. (See Fig. 328, page 44.) Whether you have old or new Iron Age Planters without fertilizer distributor, you can put on this

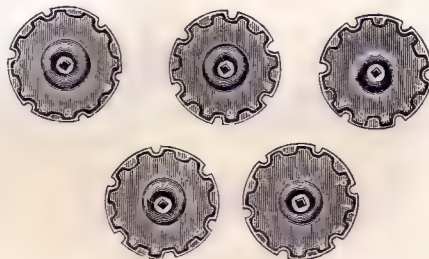


Fig. 296

Double distance seed plates. Price for set, \$2.00

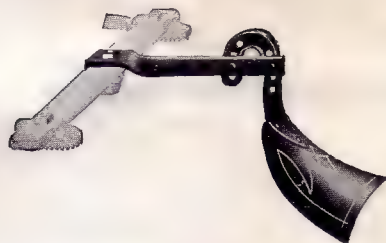


Fig. 295

Solid parts show leveler. Price, attachment only, \$1.50

it to your advantage to have this extra wheel on hand.

For side dressing. Fig. 265. This double spreader attachment makes the planter into a side dressing machine, with very little trouble and at small expense. Sowing quick-acting fertilizers to growing crops is getting to be a very common practice—it forces growth to early maturity and gets your crop to the markets quicker. This is true especially when using nitrate of soda, which the Iron Age distributor feeds perfectly, and the double spreader puts it where it is needed. When you have adjusted the gate for amount of fertilizer to be sown, hang the spreader by the hook, in the proper hole to make the fertilizer fall in the center where it will divide evenly. **For all machines built previous to 1910, it will be necessary to order the spout with the spreader, and price (complete) will be \$2.00.**



Fig. 265

Solid part shows attachment for 1910. Price, \$1.50

attachment, they can do so economically. You will note that spreader, in this case, is adjusted to throw fertilizer back—this prevents damage to the spreader by the plants. The attachment, as shown, can be furnished for any Iron Age planter.

Special Fertilizer Wheel. Fig. 357. This is the regular "star" wheel, No. P-145, which we have shipped heretofore with all fertilizers. It will go in place of No. P-145A and will increase materially the amount of fertilizer sown. This is desirable in many cases and you will find

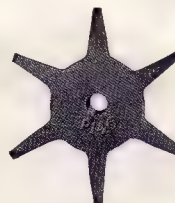


Fig. 357. - Special
To increase amount of
fertilizer sown
Price, \$.30

Special ridging attachment. Fig. 266. Many potato growers in Maine prefer to work the planter astride the rows of plants, distributing fertilizer and ridging in one operation. With this



Fig. 266

Solid parts show special ridging attachment for working astride rows. Price, \$3.00

IRON AGE

Sprayers Make the Crop Safe



Spraying potatoes near Fargo, North Dakota

DOES any man like to waste his labor and the money invested in a planted, cultivated crop? Do you wait until your buildings catch fire before providing means of fighting it? When farmers all over the country tell us that they get enough better yields, blight or no blight, to more than pay for time, spraying material and the machine, isn't it evidence that it would pay every man who raises a crop of potatoes, tomatoes, etc? Blight and rot should be avoided because they cannot be cured. The way to avoid, is to spray. In one man's letter we find blight "practically prohibits raising" and in the same breath almost, "sprayers have never been used to any extent"—does not one statement explain the other? Why not use sprayers? From another section we hear, "farmers spray thoroughly here—three to six applications"; and again, "there are no attempts to raise potatoes without sprayers." They know it pays to spray. Bugs can be got rid of, if you are prepared with a machine that does the business thoroughly and quickly. Trouble generally comes without warning—are you prepared to meet it? **Iron Age** sprayers are built to meet conditions as they are in all parts of the country. Additions to our line of attachments for special purposes, will alone pay you for a glance at the following pages. Do not miss description of the orchard attachment, and new six row and combination pole attachments. Ask for special circulars giving formulas for spraying solutions.

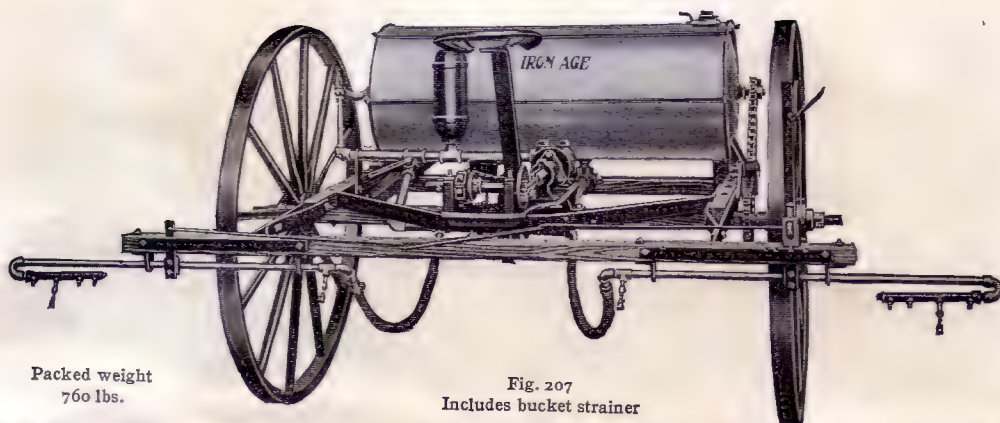


How would this field look if he hadn't sprayed the other rows? How much better if all had been sprayed?



From three rows together of the same length. First and third piles sprayed, 33.7-33.6 bushels, middle pile not sprayed, 22.2 bushels. No room for doubt. It pays to spray.

Four-Row Sprayer



Packed weight
760 lbs.

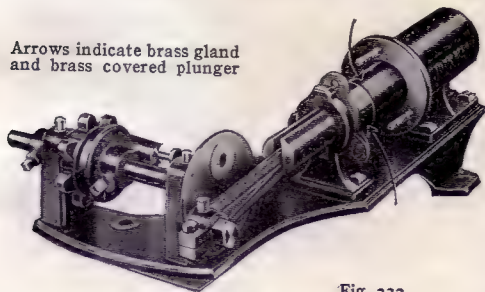
Fig. 207
Includes bucket strainer

No. 102, Fig. 207, with S. A. Pump and Thills	\$70.00	No. 102D, with D. A. Pump and Thills	\$80.00
No. 103, with S. A. Pump and Pole	72.00	No. 103D, with D. A. Pump and Pole	82.00
No. 107, with S. A. Pump and Comb. Pole	73.00	No. 107D, with D. A. Pump and Comb. Pole	83.00

"B" Spray Bar equipment at same prices as above. (See page 50.)

WE put into this machine the practical experience of many years in field and factory. Iron Age Sprayers are built of the best materials including a high grade of pipe, fittings, hose, etc. A wide range of adjustment is provided to meet conditions of planting, etc. They are long-lived machines. We give you strength, durability, capacity, convenience. Very few repairs are needed. We give you the option of several different forms of equipment and provide attachments as shown on pages 51 to 53. They are equipped, as ordered, with single or double acting pumps, steel or wood tanks, wood or steel wheels, combination pole and thills, or plain thills or pole only.

Single acting pump. Fig. 332. With this pump we are able to deliver a spray under high pressure. It is properly constructed, of the highest grade of materials and is mounted on a heavy base that keeps the working parts in line. It has a large air chamber which gives steady pressure. The plunger enters the cylinder squarely with little or no friction or wear, because the shaft driving the plunger does not pivot on the outer end but at the inner end of a slot cut in the plunger. The solutions used come in contact only with brass parts and packing that cannot be affected—the plunger passes through a brass gland and the part which enters the cylinder is also covered with brass. Neither of these parts (indicated by arrows) will corrode. The plunger does not work directly against the walls of the cylinder but against the packing, which can be easily renewed when necessary. The pump is driven by both wheels at once, from a sprocket on the main axle in the middle—there is no side draft. A handy clutch throws the pump out and in gear. Oil cups with spring caps keep plenty of oil on the bearings and keep out the dust. A high class pump which gives entire satisfaction.



Arrows indicate brass gland and brass covered plunger

Fig. 332

Price, pump only, \$20.00
Easy to get at the packing in this pump

Relief valve. Fig. 333. Attached to left head of the tank, not only gives relief for too much pressure, but helps to change the fineness of the spray. Has adjustable spring pressure. Arrows in Fig. 333 also show where Orchard attachment (Fig. 194, p. 53) is put on and how pump lever is moved to shut off pressure.

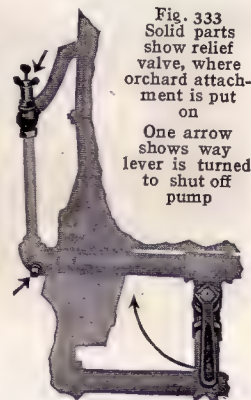


Fig. 333
Solid parts show relief valve, where orchard attachment is put on
One arrow shows way lever is turned to shut off pump

IRON AGE

Four-Row Sprayer—Continued

Double Acting Pump.
Two strokes instead of one—
constant pressure.
Price, pump only, - \$30.00

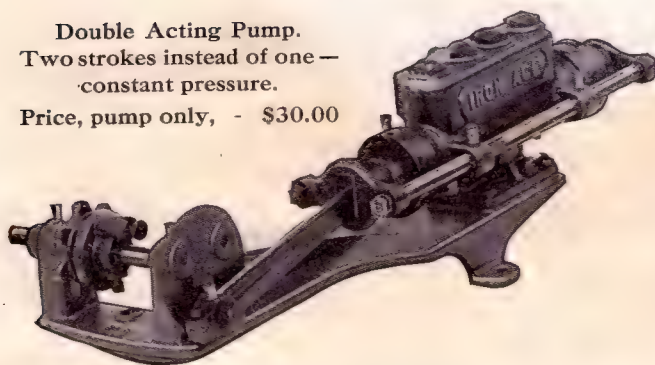


Fig. 253

If sprayers are wanted with this pump, add letter "D" to the number

valves. As in the single acting pump, the solutions used come in (including the piston) and the packing—no corrosion on that account.

The double acting pump is well mounted, special attention is given to fitting, the packing is easy to get at, plenty of spring, cap oil cups are provided, a convenient clutch throws it out of gear. It has direct action. While not absolutely necessary, this pump is recommended for use with twin nozzles or with six-row attachments on account of extra heavy pressure that is desirable.

Tank. Nos. 102-103 Sprayers are furnished with steel tanks unless otherwise ordered. They are 48 inches long, 18½ inches in diameter and hold 55 gallons, a little more than a large barrel. They are heavily galvanized after they are made up, so that all joints, bolt heads, etc., get the same dose. Revolving dashers stir the solution all the time and give no chance for sediment or undissolved material to deposit in the bottom where it would harden and crack up, to bother in future operation of the sprayer. With thorough agitation of the solution and high pressure, you can use strong solutions, and the smallest amount of water, without danger of part of the plants getting a stronger

Double acting pump. Fig. 253. Those who have made a study of results from spraying under different pressures find that a double acting pump is better when you spray for blight. So we equip Iron Age Sprayers with them when ordered. They deliver spray at a very high pressure—a gauge is furnished so the operator can see what his pressure is and regulate it as needed. You get two strokes instead of one, keeping the pressure steady. The check valves are on top—if sediment does get in, the valves can be removed easily. On some machines you have to tear the pump to pieces to get at your contact only with brass parts

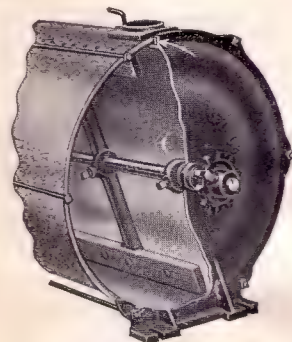


Fig. 334

Showing dasher and gasket

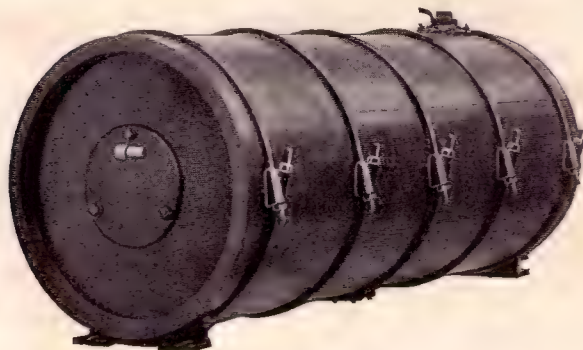


Fig. 251

Wood tank, 55 gallons. If wanted on complete machines, add letter "E" to the number

dose than others. The arrow in Fig. 334 shows rubber gasket between tank end and the cast head—when bolted tight they prevent leakage. The bucket strainer is attached at opening in the top—the vent pipe at one side of the opening permits free passage of air to and from the tank. A surface valve is provided so you can clean the inside of the tank thoroughly.

Wood tank. Fig. 251. Capacity 55 gallons. Made of the best grade of inch cypress, and has adjustable steel hoops—is strong and durable. Furnished only when ordered. Letter "E" should be added to number of the complete machine when wanted with this equipment, as No. 102E.

Four-Row Sprayer—Continued



Fig. 337

Note way in which nozzles are moved from one plug to another. Adjustment of lever equalizes distances apart

Spraying nozzles. Fig. 337. They are where the operator can see them at all times. To adjust in height, loosen two nuts, lift the spray gang as high as you want it and tighten. A lever slides the nozzles in and out—saves breakage when turning near fences or passing through narrow gateways and saves space for storage. At the same time, the lever when set holds the nozzles in position for business. The nozzles are adjustable to four widths of rows—28, 30, 33 and 36 inches—and we can furnish, when ordered, wide rear bar so you can spray rows 42 inches apart, and same range of adjustment as above. Order wide equipment by adding letter "B" to number of the machine, as No. 102B.

Wheels. For this season, we shall equip all Iron Age sprayers with wood wheels, unless steel wheels are specified. The wood wheels are 50 inches in diameter with 3-inch tires. They are adjustable for any width rows between 28 and 36 inches.

No. 105D Four-Row 100-Gallon Sprayer

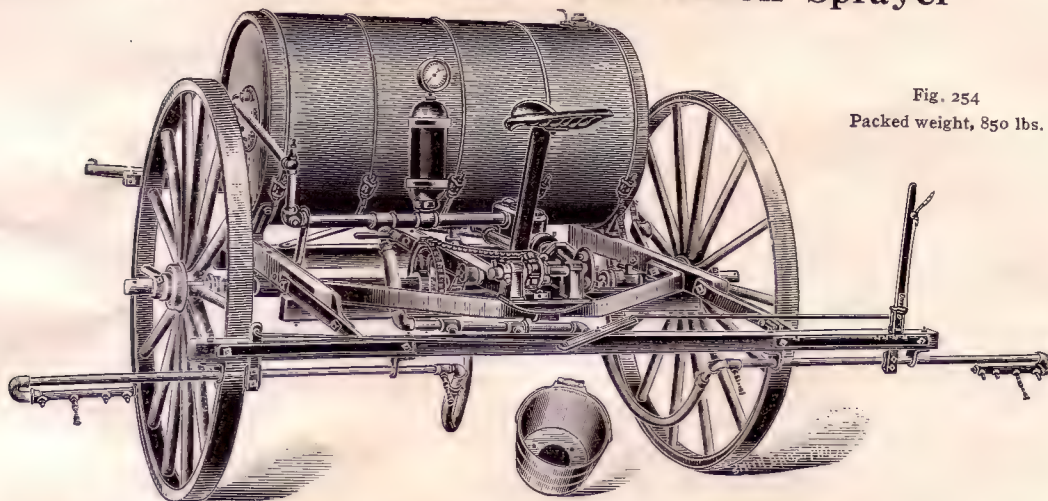


Fig. 254

Packed weight, 850 lbs.

No. 105D. Fig. 254, with D. A. Pump and Pole \$ 92.00
No. 105DS. Six-Row Sprayer, with D. A. Pump
and Pole 100.00

No. 105, with S. A. Pump and Pole \$82.00
No. 105B, with S. A. Pump, Pole and wide
Spray Bar 82.00

TO meet the demand for a Sprayer of larger capacity. Is built with heavier wood frame to carry the extra weight.

The tank holds 100 gallons. It is made of the best quality of one inch cypress and has adjustable steel hoops—is strong and durable. Dasher blades keep the solution well stirred and prevent deposit of sediment.

Pump. No. 105D is supplied with double acting pump unless single acting is specified when it is known as plain No. 105. Where machines of this capacity are used, they usually want the highest, steady pressure and prefer double acting pumps. This is especially true where extra equipment is used such as twin nozzles, Fig. 208, page 53.

Spraying nozzles. This machine has same general equipment as on No. 102 and same adjustments for width of rows, and so forth. Also takes extra wide bar that allows spraying rows 42 inches wide. When wanted this way, add letter "B" to number, as No. 105DB.

Wheels are same as on No. 102.

IRON AGE

Attachments for Sprayers

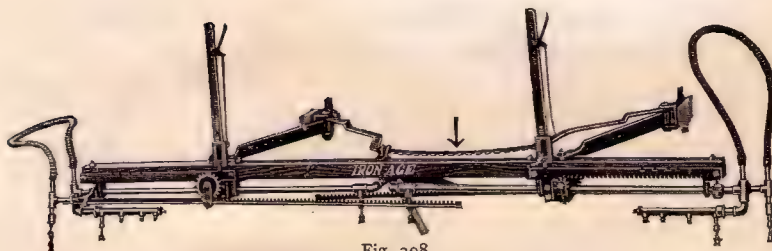


Fig. 298

Six-row and wind-shift attachment only. Price, \$15.00

When ordered with complete machine add \$8.00 to price of machine and add letter "S" to the number

SIX-ROW and windshift attachment. Fig. 298.

For spraying six rows at once. The arrow indicates adjustable wind shift by which you can, with your foot, throw your bar farther out toward the wind, which will bring your spray back to the row just right. The spray bar supports are pivoted on each side at inner

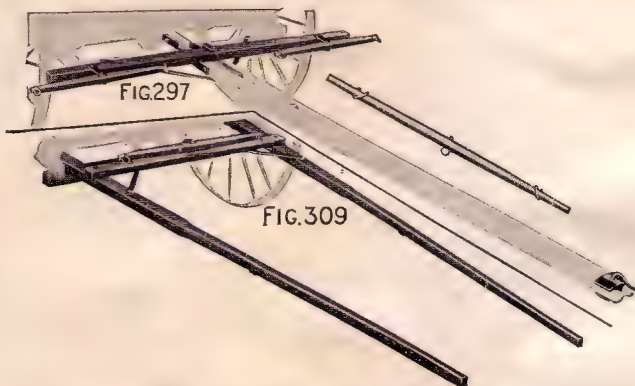
ends and are locked in position by ratchet teeth on wind-shift bar. Ratchet plates, at pivot ends of bar supports, give you adjustment for height of spray bar. Two levers slide out each section of spray pipe separately. In shifting, the outside nozzle moves three times as fast as the inner nozzles by the use of two small gears. Fig. 335 shows one side extended, ready for business. Rows can be 28, 30, 33 and 36 inches wide. If wide bar is used, you can spray six rows 42 inches apart down to 34 inches—must be specified when wanted that way. We recommend the use of double acting pump with this attachment, but will furnish it for machines that have single acting pumps, if necessary.



Fig. 335

Six-row attachment extended

Combination pole and thills. A great many farmers want to be able to use two horses or one on sprayers. The solid parts in Fig. 297 show what is necessary to change Iron Age sprayer thills to combination pole and thills. These extra parts will be furnished for any old machines. When new No. 102 is wanted with this equipment order as No. 107. The pole when set up this way is securely attached, well braced and rigid. Extra long doubletrees and neck-yoke to permit spraying astride two 36-inch rows. Fig. 309 represents the thill form and can be supplied this way for any old No. 103, when wanted.



Solid parts in Fig. 297 show what is necessary to change thills to combination pole and thills

Price, \$6.00

Pole attachment. Fig. 210. We shall continue to furnish this outfit as an attachment for any who prefer a solid pole to combination pole and thills. It is the same equipment as on No. 103 sprayer. A pole (solid or combination) is better for hilly sections and a necessity for three-row spraying. Extra long doubletrees and neck-yoke are furnished.

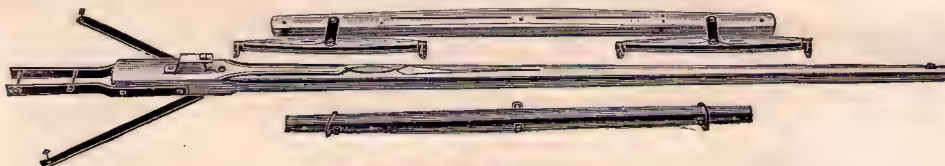


Fig. 210. Pole attachment

Price, \$5.00

Attachments for Sprayers—Continued

We aim to give every man the equipment he needs to meet his own particular conditions of planting, style of crop, climate, etc. Whether you grow potatoes, tomatoes, cucumbers, citron, melons, small fruits or any other row crops likely to be infected with disease or by insects, or have an orchard or vineyard that needs to be looked after, we can fit you out with the right equipment. To get the best results from your spraying, each crop should be treated separately, with the right mixture in each case and with regard for the growth of the plant.

With their wide range of adjustment and the various attachments furnished as needed, **Iron Age Sprayers** are a valuable combination for any farmer to own and use, but you don't have to load up with more parts than you need. You can buy an **Iron Age Sprayer** in any combination that suits you.

Middle row attachment. Fig. 209. For use when spraying three rows of vine crops, such as cucumbers, tomatoes, etc. Can only be used

on sprayers that have the pole attachment or combination pole. Is easily attached to center of sprayer bar. The solid parts in the cut show what you get with the attachment—no nozzles are sent at price quoted, but will be furnished when ordered.

Tomato spraying attachment. Fig. 219. Is furnished in three sections, A, B and C, to do the work in the right way at each stage of the growth of vines. Can only be used with sprayers equipped with pole, and sprays one or two rows, depending on size of the vines. When plants are small, the curved pipes marked "A" spray astride one row and the sides of the next two rows. When plants are medium size, pipes marked "B" are used in the same way. When plants are full grown, one-half of the pipes marked "B" are used in connection with middle row attachment marked "C" for spraying one row only.

Nozzle Strainer. Fig. 227.

Strains all of the solution and keeps particles of dirt from stopping the flow through the nozzle. Fig. 227 shows the three parts and fineness of the screen. No matter what crops you are spraying, this attachment will be of great value and it is effective. Fig. 226 shows strainer complete attached to nozzle—solid part only is sold at the price, but nozzle can be furnished, when ordered. It is shown attached

to indicate how the strainer is used, and also serves as an enlarged illustration of our fine Ver-morel nozzle. We emphasize the value of this attachment, for it is a mighty good thing, and pays for itself many times over.

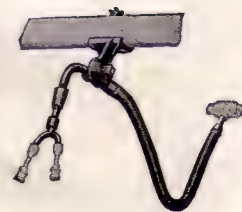


Fig. 209
Solid parts show middle row attachment
Price, \$2.00

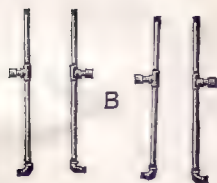


Fig. 219.
Tomato spraying attachment complete, \$5.00. Less "C," \$3.00

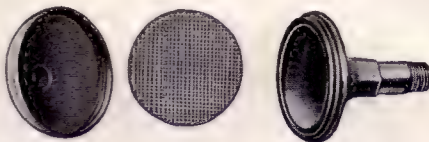


Fig. 227. Price, \$.90



Fig. 226
No nozzle with strainer attachment



Fig. 220

Solid parts only, included in wild mustard attachment. Price \$4.00

Wild mustard attachment. Fig. 220. To kill wild mustard, which has become a nuisance in some parts of the country. Attachment consists of four sections of piping and the four extra nozzles shown solid in the cut.

Attachments for Sprayers—Continued



Fig. 208
Twin nozzle attachment. Includes solid parts only. Price, \$4.50

Twin-nozzle attachment. Fig. 208. Is especially valuable when spraying for blight and should be used only on sprayer equipped with double acting pump, if you want the best results. The attachment consists of four "Y" couplings and four extra nozzles as shown by solid parts in the cut. When you order sprayers this way, add letter "A" to the number, as No. 102DA—means No. 102 with double acting pump and twin nozzle attachment.

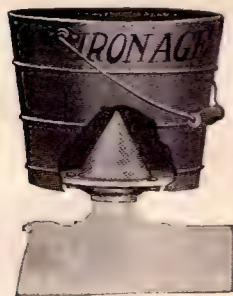


Fig. 336
Bucket strainer. Free with each machine. When separate, \$1.75

Bucket strainer. Fig. 336. One goes with every sprayer. Made first class in every way—seasoned material, electric welded steel hoops, fine wire gauze screen in the bottom and is bolted securely to fitting that screws into opening in the tank. Sold separate if needed.

Orchard attachment. Fig. 194. For the potato grower who also has an orchard of moderate size—for the fruit man who believes that it is necessary to spray trees, grape vines, berry bushes, etc. **Iron Age** pump pressure forces the spray high and very fine, with entirely satisfactory results. The attachment consists of 25 feet of rubber hose, 10 feet of iron pipe, one Vermorel nozzle, a stop cock and fitting that attaches next to the machine and hand pump lever. You can shut off the spray at any time. Two persons are necessary to operate when spraying trees—



Fig. 194. Price \$7.00

one to work the pump lever—the other to handle the spray nozzle. A one-fourth stroke of the pump lever is enough. The same operator can drive. This attachment can be applied to any **Iron Age** sprayer. Many people buy the sprayer equipped this way for use only in orchards—they find it pays and is a convenient machine to have around. It pays to spray consistently and not wait until scale has nearly ruined your orchard before you try the cure. Is your orchard a profitable investment or merely a side issue? The orchard has been known to pay for the farm in two or three years. Take care of the trees and they will take care of you. An equipment like this saves buying two different machines to do two kinds of work. This means economy in first cost, in repairs and in storage room.



No. 102 sprayer with orchard attachment
At work when it does the most good

Potato Diggers—What They Save



Iron Age saves all of a big crop under difficult conditions



No. 120 doing fine work in turnips

WE do not know what proportion of growers dig their crops in the old style ways. We suppose there are few, comparatively, who dig by hand. A great many still use a plow. Some, because they think all old ways are best.—Are they? Others, because plowing seems best for their peculiar conditions.—Why not change those conditions? Still others are not ready for the extra cost of a real digger.—Which is cheapest in the long run, to go on in the slow expensive harder way or buy what saves time, crop and backaches—a machine that digs, separates soil, vines and potatoes, without any injury to the crop, without heavy draft for the team? It would be impossible to raise enough potatoes for use in this country, let alone for export, if we dug by hand. It takes far more help to pick up after a plow than when following a digger, and help is scarce and high priced. A modern digger pays for itself in a short time. Using such a machine, you are able to dig fast and get to town ahead of your neighbor or at least in time to compete with him. Time is always money, but especially so when harvesting and marketing your crop.

Potatoes are a paying crop when put in and taken care of in the right way. This country imports potatoes now, in large quantities, but the use of improved machinery for planting, fertilizing, cultivating, spraying and digging, means increased acreage and a larger crop to meet the demand. The time will not come for many years, when we shall be able to raise enough for our

own needs—even then the world's markets will be open to us—prices will keep up. You cannot hope to get full benefit from such conditions without the best machines with which to do the most good work at the least expense.

Iron Age Potato Diggers are built in two styles to suit the trade:—one, No. 120, is a Low Down Rotary Disc machine that can be operated with or without an elevator;—the other, No. 150, is strictly an elevator machine, of light weight and draft. Each takes attachments that help operation on hard, heavy ground, under weedy conditions, for work on side hills, on stony ground. If you grow potatoes on a large or small scale, you will find some things of real interest to you in the following pages where construction details are shown.



"Potato Diggers"

Most of us would have to go without, if everybody dug in this way

IRON AGE

No. 120 Low Down Potato Digger

No. 120, Fig. 200 - - - \$90.00

No. 120D (with Fig. 301 in place
of roller) - - - 90.00

A combination that means something. This digger is built to be used with or without an elevator, and to take special attachments that meet each condition peculiar to each section. You do not need to buy, your team does not need to draw, any parts that will not be used. This saves first cost, repairs and horses.

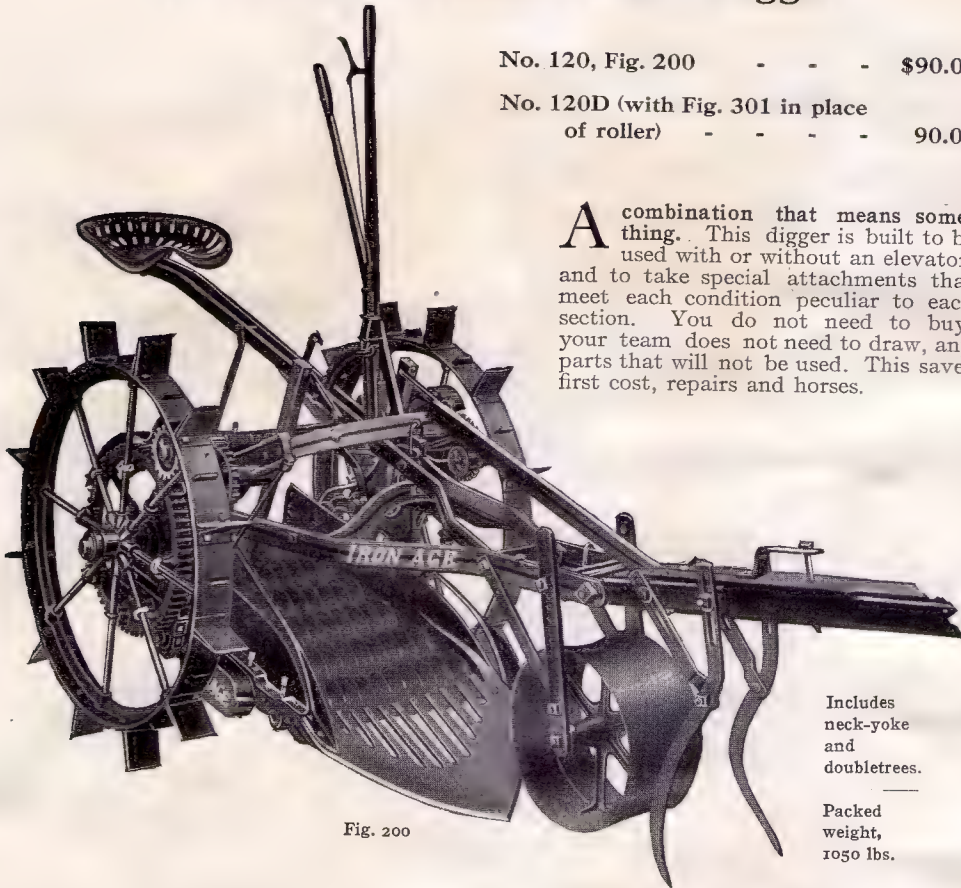


Fig. 200

Includes
neck-yoke
and
doubletrees.

Packed
weight,
1050 lbs.

Separation. Fig. 338 shows six rolls of rotary, separating discs, one of them removed. They are placed low in the frame—potatoes and soil are not elevated—takes less power and the crop has no unnecessary handling. The larger part of the potatoes grown in this country require no other equipment. Many crops of potatoes in light sandy soil can be dug successfully with four or five rolls of discs. Here is another place where we save power and handle the crop less. The rolls are easily taken off and put on again, if you get into heavy ground. Under all conditions you get thorough separation. Fig. 338 shows what we call the cradle—the front four rolls are open, like a sieve, for soil and stones to pass through. The discs, bushings and square shafting are all steel, wear well and are readily replaced by the operator when necessary. There are 66 separating discs—all are 5½ inches in diameter except those in the center of front roll—they revolve continually while the machine is in motion. In this form, the digger needs but two horses to operate it. Back of the fifth roll we show an attachment on each side, to gather the vines in the row so the wheels won't have to run over them on the next round.

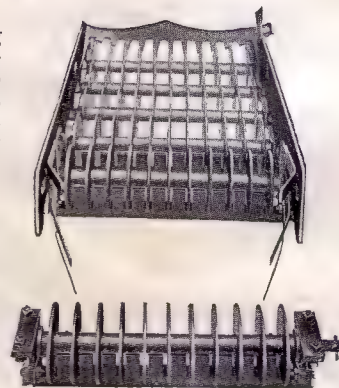


Fig. 338. Frame, plow and rolls of discs. Some crops need but five or even four rolls.

No. 122 Potato Digger

Elevator attachment. Fig. 201. When you cannot get satisfactory separation with the six rolls, remove fifth and sixth rolls and attach elevator with shaker complete, making **Fig. 202**. The apron is made of interlocking steel cross bars and with the four front rolls and the shaker, keeps in continual motion and gives perfect separation. The shaker is steel and shaped just right so the potatoes are dropped in a narrow space in the middle of the row. A lever adjusts the level at which the shaker works. Shaker may be removed when not needed. The elevator is adjustable in height and in position on the machine. There are adjustments for tightening the chain, and extra links are sent with each machine. The framework, elevator sides and shaker shields are steel. The whole attachment is soon put on without much trouble. Three horses can handle Fig. 202 easily because the rolls in front, with their easy, rotary motion, do part of the work. Other elevator machines usually need four horses.

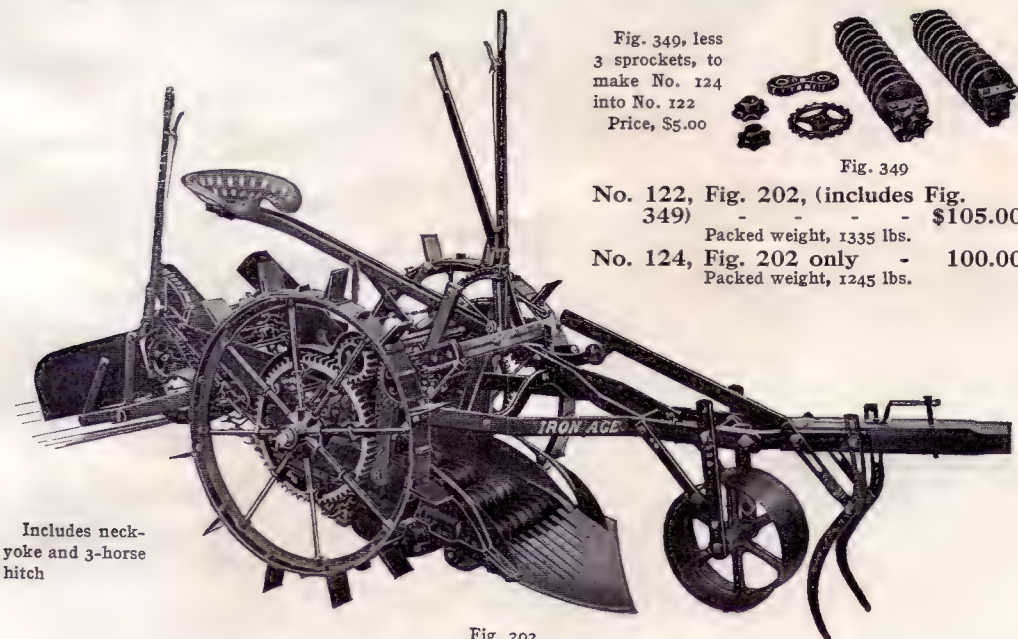
Vine gatherers. "Well begun is half done." We take care of the vines with forked steel parts, shaped and adjusted to straighten out the vines ahead so they will pass under the roller.

Single roller. This is our regular equipment for this machine. The roller is 14 inches in diameter and has 8-inch concave face. It crushes the vines and keeps them in the best shape for digging. The roller is adjustable for height, forward and backward, and a lever convenient to the seat, raises it clear of the ground to pass over rocks, etc. We provide for heavy vines with a disc attachment shown in Fig. 205, page 58.



No. 121, Fig. 201
with 3-Horse
Hitch - - \$15.00
Packed weight, 265 lbs.

Fig. 201



Includes neck-
yoke and 3-horse
hitch

Fig. 202

Fig. 349, less
3 sprockets, to
make No. 124
into No. 122
Price, \$5.00



Fig. 349

No. 122, Fig. 202, (includes Fig.
349) - - - \$105.00
Packed weight, 1335 lbs.
No. 124, Fig. 202 only - 100.00
Packed weight, 1245 lbs.

IRON AGE

No. 120 Potato Digger

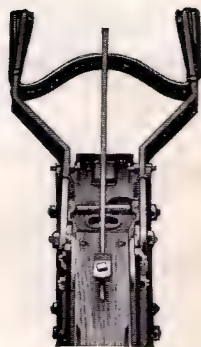


Fig. 339
No side swing to this pole. Can back with it

THE plow is a wide, heavy, concave steel blade, $\frac{5}{16}$ of an inch thick. It is slotted at upper end, reducing friction. There is no clogging, and separation begins at once. The depth at which the plow works is adjusted by lever.

Pole connections. Fig. 339. While the pole is hinged to move up and down, it has no side swing and is attached so the machine can be backed and kept over the row, and the plow held at any depth. The machine is always under control, which is not true of those machines that make their connections by hooks. Theirs may be called "limber poles" and operator does not have control on any of these points.

The framework is mostly of steel and malleable iron, and wears like it—makes a strong foundation to stand the heaviest work.

Wheels are cast iron with steel spokes, a large, heavy gear is securely attached to each wheel, and power is taken from both sides at once. Each digger is now supplied with a full set of steel spurs as shown in Figs. 200 and 202. They add a great deal to the traction power in many soils. See also page 58.

Fig. 340 shows the gearing that runs the rolls on one side. Note the way in which both chains are tightened, tubes for oiling, and cover for forward sprockets to protect against winding and dirt. A similar arrangement on the opposite side completes a continuous system from one roll to the next, to keep them all moving. The beauty of this system is that you can easily disconnect the rear sprockets and chain when you want to use but four or five rolls. With a pair of small clutches the driver can throw the machine in gear from the seat.

Kickers or tedder sticks keep the vines and trash on the move to the rear. They can be set to work together or alternately, as on a hay tedder.



No. 120 on a Jersey truck farm

practically necessary where high ridging is practiced or where potatoes are planted in checks. It is attached to the pole with pivot connections that allow it to swing up and down, both wheels hugging the ground at all times. The wheels swing on castors. Other machines with two-wheel equipment turn almost on one wheel—you are not only likely to tip over but machine may be strained every time you turn. With this Iron Age equipment, unevenness of the ground doesn't matter. On level ground, in a ditch, on a grass hummock at edge of the field, over roots around a tree in the center of the field, on a side hill—they are all the same to this machine. The framework is steel and the pivots secure. Fully covered by patent. When ordering, please add letter "D" to the number, as No. 120D.

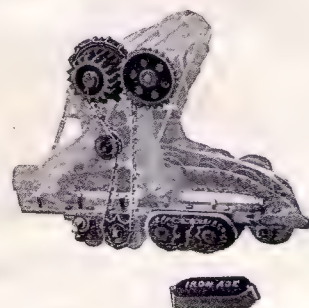


Fig. 340
Showing gear shield, chains and tighteners, oil tubes for bearings

Attachments

Best two-wheel equipment on any digger. Fig. 301. Can be supplied in place of the single roller at same price for the complete machine. It is



Fig. 301
Price, when separate, \$8.00.
Arrows indicate pivot joints and wheel swivels

Attachments for Potato Diggers

Vine separator. Fig. 231. With this attachment, the vines are delivered at one side of the row and the potatoes dropped in the middle of the row in a narrow space. Consists of a steel bracket and four steel tines curved to the left at the outer ends, and all attached above the shaker. Under difficult conditions, these curved tines often produce better separation of soil and potatoes. When ordering, please add "B" to number of the machine, as No. 122B.

Disk attachment. Fig. 205. Should be used in digging early white potatoes. Also, when vines are extremely heavy growth and hard to take care of, and when digging

Solid parts show disk attachment,
Price, \$8.00. Order No. 1 for
No. 120 digger

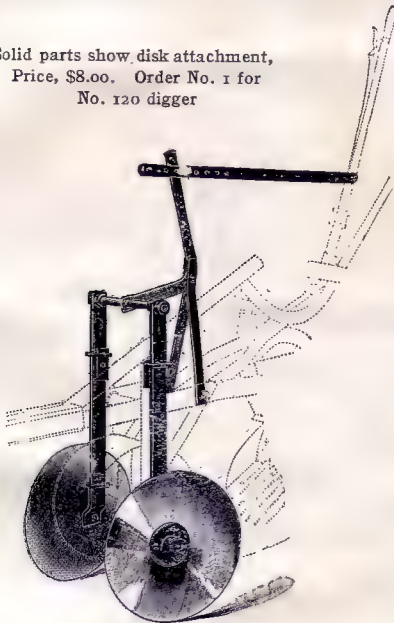


Fig. 205

Cannot be used with two wheel equipment

Three-horse hitch, less doubletrees. Fig. 203. As shown, they include simply the parts necessary to complete a three-horse rig for driving three abreast, and are so arranged as to equalize the draft.

Four-horse hitch, less one set of doubletrees. Is intended to hitch four horses abreast and not strung out. Furnished as an attachment at \$4.00.

Iron Age Potato Diggers are light draft. Two horses are sufficient for No. 120 and three for No. 122. For those who have plenty of horses and prefer to use more than are really necessary, we provide these parts.

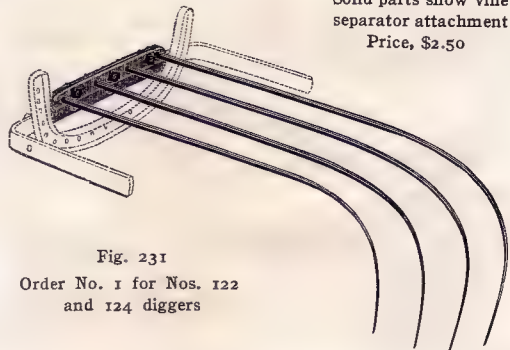


Fig. 231

Order No. 1 for Nos. 122
and 124 diggers

Solid parts show vine
separator attachment
Price, \$2.50

the late crop, overrun with grass and weeds. Can be used only with the single roller in front—not with two wheel equipment, Fig. 301. The attachment is easily applied to the machine and is operated by the same lever that controls the plow. Adjustment of cutting depth for high or low ridges, is made by change of a single pin. May also be adjusted in width to suit the growth of different varieties of the crop. This attachment is always used on No. 120 when working in sweet potatoes. The concave discs cut and throw aside a large portion of the vines and also a portion of the soil. When ordering, please specify No. 1 Disc attachment.



Fig. 263

Side hill spurs for wheels. Price, for set of 24, \$3.00

Side hill spurs. Fig. 263. Complete sets of special steel spurs are furnished as an attachment. They are for extreme side hill conditions and will hold the digger up to its work.

Regular steel spurs. Complete sets of these spurs, as described on page 57, will be supplied as an attachment, for any old style No. 120 Digger. Price, per set of 24, \$3.00.

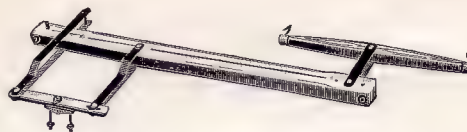


Fig. 203. Three-horse hitch, less doubletrees. Price, \$3.00

New No. 150 Elevator Potato Digger

WHEN this catalog goes to press, we will have finished our first season with this new elevator digger in the field. Its quick jump to popular favor has compelled us to put through several re-orders for stock with which to keep pace with the demand for them. They have been thoroughly tried out in hundreds of field tests—these have suggested some improvements but nothing radical. You will get a new machine but one with an established name for good work under all kinds of conditions.

It is built for those farmers who want a labor-saving, crop-saving machine to dig potatoes, but prefer a cheaper machine than No. 120. No. 150 meets these growers' requirements. It is strictly an elevator

Price, Fig. 299 - - \$75.00

Packed weight, 750 lbs.

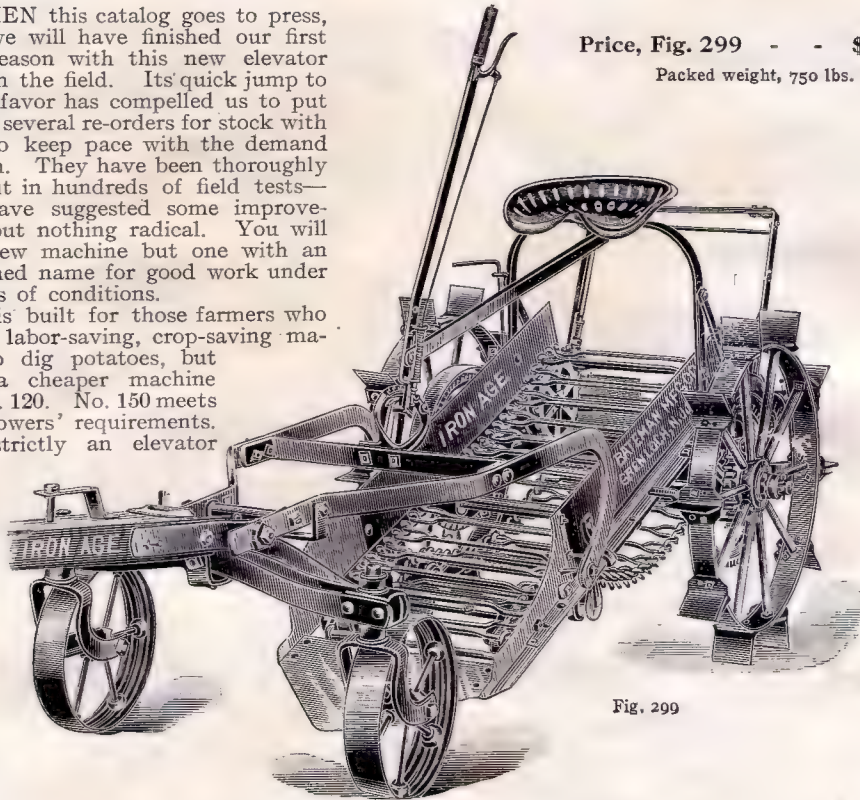


Fig. 299

digger but will take the necessary attachments to meet conditions in all parts of the country. No. 150 is a light weight machine but is not cheap and is strong enough to do your work in the best way possible. It is built almost entirely of malleable castings and steel—is strong, compact, carefully fitted and keeps tightly bolted. The main frame side bars are steel angles. The wheels are steel, 28 inches in diameter, 2½ inch rim and have cast removable hub box—the only part that can wear can be cheaply replaced. Steel spurs, as shown in Fig. 299 give the necessary traction for level ground. For hillside work, they can be bolted to the rim in a diagonal position so they will hold the machine from slipping. (Fig. 341.)

The ⅝ inch steel plow gets under the potatoes and does not cut them. Soil and potatoes are separated thoroughly—elliptical sprockets give the elevator apron just the right automatic movement. The shaker completes the separation. The elevator apron consists of interlocking cross bars of steel, has no unnecessary tension and is driven direct by gearing from both main wheels.

The shaker has uniform motion which is not affected by heavy crop or soil conditions—it is operated from both sides—will take care of heavy grassy conditions. The shaker is shipped with the tines all on one level, to be shaped by the operator to drop the potatoes in the middle or at one side of the row, as he prefers.

Chains and gearing are thoroughly shielded against dirt, vines and grass. Thorough provision is made for oiling.

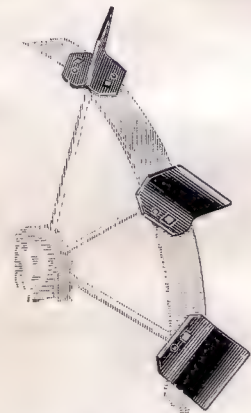


Fig. 341

Spurs set diagonally. No slipping on hillsides

New No. 150 Elevator Potato Digger—Continued

Separate, removable bearings are used to carry the elevator apron. They are cast iron with the part most likely to wear chilled. Fig. 355 shows the parts separate and also the way they are applied on the machine. Flanged parts and washers that set in, protect the bearings against sand. They are cheaply replaced and easily put on by the operator. This point is very important, as most of the wear on any digger is at this point, and you don't want a machine that will be both expensive and difficult to keep in repair.

No. 150 is the only digger that throws in and out of gear from the seat. Fig. 356. One lever shifts the pawls in each wheel at once. Do

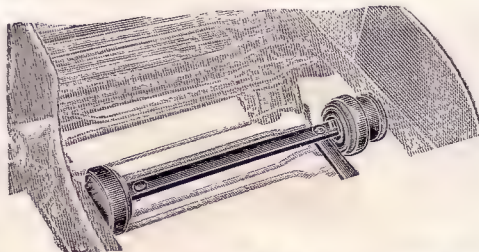


Fig. 355

Separate bearings for elevator. Cheaply and easily replaced when worn

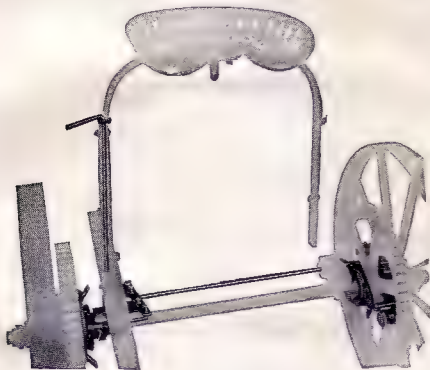


Fig. 356

Shifts from the seat
Saves scattering potatoes at ends of rows

you know what that means to you? You don't have to get down—you don't have to throw each side out separately—you can throw out of gear at the end of each row and retain the potatoes on the shaker instead of scattering them when turning. Saves time and considerable hard work, picking up after the other kind of machines. The shifting arrangement is very simple and complete—not easily got out of order.

The Pole pivots to move up and down, but does not swing from side to side—is rigid and the operator has entire control. You can back the machine, can keep over the rows, can keep the plow at any depth when set. In other words, you know just what you are doing at all times. Those machines which have poles attached by hooks cannot be controlled on any of these points.

Strong frame braces connect pole and frame, and provide way to raise and lower plow and elevator. Close adjustments are made—no extra load of soil need be carried when digging. The operator has a comfortable seat—it is placed where the driver's weight will assist in tilting the machine. Elevator sides are sheet steel. The height of the shaker is adjusted from the seat.

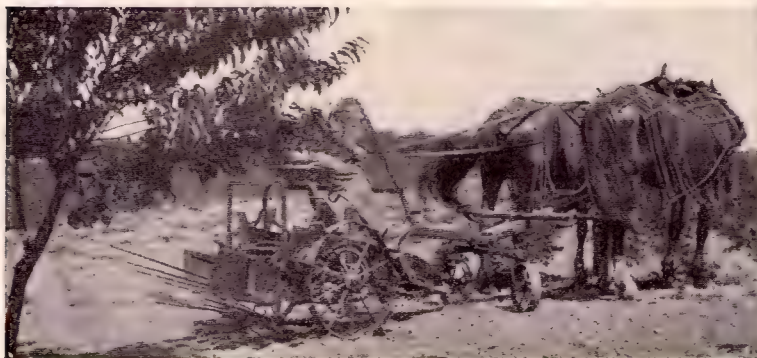


No. 150 in a rank growth of weeds and grass
Meets heavy conditions satisfactorily



No. 150 in a low stony piece
Separating vines from potatoes

New No. 150 Elevator Potato Digger—Continued



Turning into the next row

Two-wheel equipment. No. 150 is furnished this way regularly. See Fig. 299 on page 59, and Fig. 301 on page 57. Is the best two-wheel equipment in use on any digger—is pivoted in the center to swing up or down, and has swivel for the wheels. Fits every unevenness of ground, prevents strain on the frame, and you can turn short at ends of rows without danger of upsetting. Some machines turn almost on one wheel.

A Single Roller in front will be furnished in place of the two-wheel equipment, at the same price. Order as **No. 150-S**, Fig. 300. It will crush vines and trash over the row so they can be elevated more easily. Is adjustable for extreme depths by means of the holes in the brackets that support it.

Vine Separator attachment. Like Fig. 231 on page 58. The vines are delivered to one side of the row while the potatoes fall wherever the shaker tines are shaped to carry them, either to middle of the row or to the other side. Use of this attachment often produces better separation of soil and potatoes, because of the curved tines. **Order No. 2** for this machine. **Price, attachment only, \$2.50.** When complete machine is wanted with Vine Separator, add letter "B" to the number, as **No. 150B**.

Disc attachment. Like Fig. 205 on page 58. Can be used only with Single Roller shown in Fig. 300—not with two-wheel equipment. Should be used in digging early white potatoes—when vines are very heavy—when digging late crop, overrun with grass and weeds. Easily applied to the machine and one pin adjusts for high and low ridges. Is adjustable, also, for width to suit the growth of different varieties of the crop. **Order No. 2** for this machine. **Price, attachment only, \$8.00.**

Three and four horse rigs. As shipped, the machine is furnished without doubletrees or neckyoke. When ordered, we furnish complete three-horse rig, including doubletrees, single-tree and long evenner. **Price, \$4.00.** Complete four-horse rig including two sets of doubletrees and long evenner. **Price, \$5.00.**

One season's use has demonstrated that this digger is all right—that it does its work in a manner satisfactory to all users—that it works without damage to the crop—that it meets conditions when properly handled—that it stands up well under rough usage. We guarantee it to do as good work as any digger of its kind on the market.

No. 150S, Fig. 300

Price - - \$75.00

Packed weight, 742 lbs.

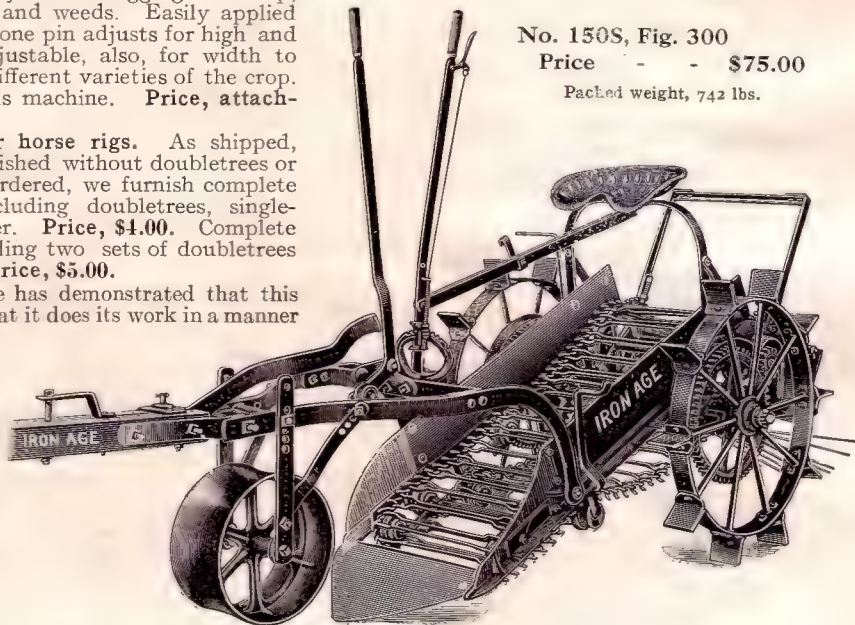


Fig. 300

IRON AGE

(New York Champion) Wood Hay Rake



NO.	WIDTH	TEETH		NO.	WIDTH	TEETH	
1 or 2	8 ft.	20		1C or 2C	8 ft.	20	
1 or 2	8 ft.	26		1C or 2C	8 ft.	26	
1 or 2	9 ft.	22		1C or 2C	9 ft.	22	
1 or 2	9 ft.	27		1C or 2C	9 ft.	27	
1 or 2	10 ft.	24		1C or 2C	10 ft.	24	
1 or 2	10 ft.	31		1C or 2C	10 ft.	31	
			\$25.00				\$26.00
			26.00				27.00
			26.00				27.00
			27.00				28.00
			27.00				28.00
			28.00				29.00

"C" means with Combination Pole and Shafts. Fig. 271

For weights, see page 2

THESE are the original Patten & Stafford rakes, so well and widely known throughout the country as the best of their kind. We purchased, in 1908, the sole right to make them, with patterns, patents and good will. The latter we value highly for we know what the trade thinks of these rakes.

We do not make an all-steel rake but mostly wood—at one time the all-steel was the popular rake, but the demand is fast turning back to wood rakes—the others do not stand up on the rolling land of eastern territory.

The Iron Age rakes are identical with the New York Champion and are made first class in every respect. Two styles are manufactured.

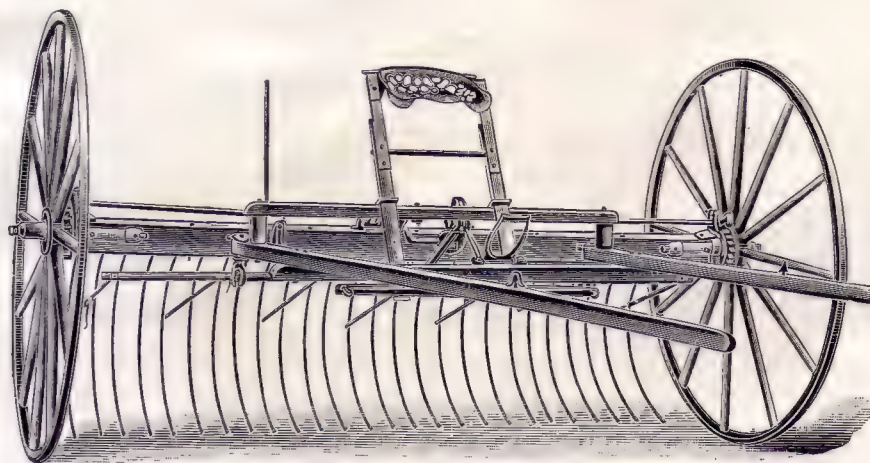


Fig. 270, No. 1, Wood Axle

IRON AGE

(New York Champion) Wood Hay Rake—Continued

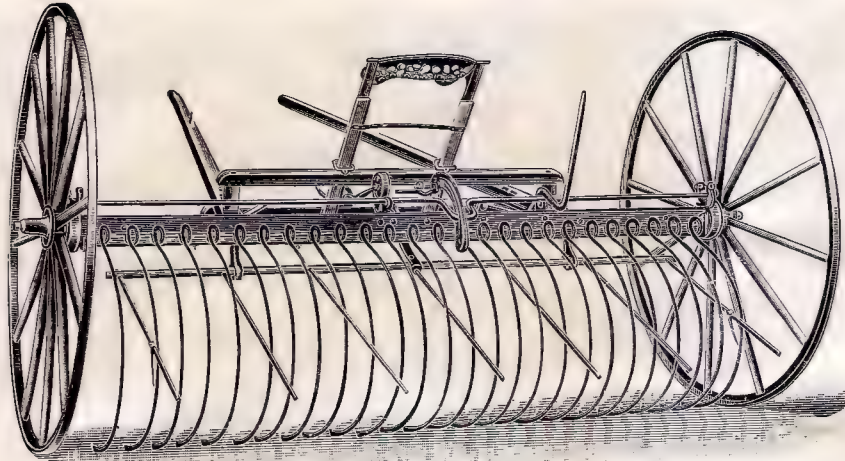


Fig. 272, No. 2, Wood and Steel Axle

No. 1 Rake. Fig. 270. Has complete wood axle.

No. 2 Rake. Fig. 272. Same as No. 1, except has a wood axle reinforced with angle steel. This is the improved rake, placed on the market by Patten & Stafford Co., just previous to the burning of their factory. The No. 2 is the stronger and more durable rake, especially in the 9- and 10-foot sizes.

The teeth are oil tempered, flat pointed (sled-runner shape) interchangeable (no rights and lefts). They hang just right to catch all the hay and clean the ground without scratching—they lift high when dumping—have free action in tooth holders, so they are not easily damaged.

Cleaners are steel, diamond-shaped, securely bolted to steel pipe. They pack the hay as the teeth fill and keep the hay from rolling. Pressure on the cleaner foot lever makes larger windrows and bunches them when needed.

Levers, hand and foot, give the driver control at all times. Dumps with a one-piece rod from both wheels at once—even draft.

Wood wheels are furnished on all rakes unless otherwise specified. They have loose hubs and separate ratchets, easily replaced when worn. If steel wheels are wanted, add letter "S" to the number, as **No. 2S**.

The wide rakes (9- and 10-foot) are trussed to prevent sagging in the center.

Combination pole and thills. Fig. 271. For two horses or one. Can be furnished for any Iron Age (New York Champion) rake. A practical combination. The solid parts in the cut show what is necessary to make the thills into the combination pole—the dotted lines show the way both are attached. When new rakes are wanted this way, add letter "C" to the number, as **No. 1C**.

Patten & Stafford repair parts. As we have the original patterns



Fig. 271

Solid parts show what is necessary to change thills to combination pole
Price, solid parts only, \$1.00

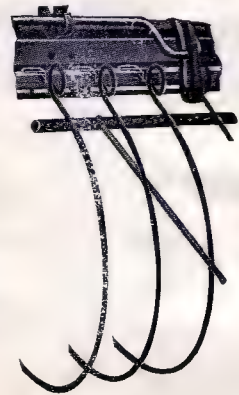


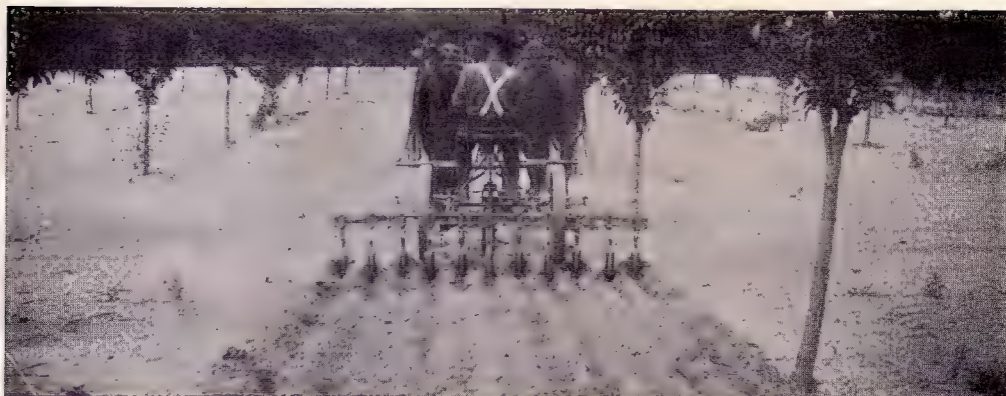
Fig. 342
Interchangeable teeth,
flat-pointed, have
free action

for parts on the principal styles of New York Champion rakes, we are prepared to furnish the trade with repair parts for the same, that will fit.

Price lists are furnished which give Patten & Stafford numbers, as well as our own.

IRON AGE

Orchard and Variety Cultivator



FRUIT raising is a branch of farming in a class by itself—fruit trees and soil require special attention to get a good crop in these days—it won't do to let them go as has been the general custom.

Thorough and frequent cultivation are quite as necessary, in the opinion of the orchard man, as any other part of the work or for any other crop—it pays to do it. The cut at the top of the page and **Fig. 197** show the **Iron Age** with extensions for working under the branches, near the trunks of the trees, without injuring the branches. With this machine, cultivation is shallow so the roots will not be injured and yet all the ground is cultivated and a fine dust mulch formed. This helps to keep the moisture around the roots in dry season and to give the right kind of root food. With this machine you can get over the ground quicker and more often—every time counts.

Fig. 275 shows the No. 110 as shipped regularly—cultivates 4 feet 2 inches wide. With orchard extensions, it will cultivate 6 feet 9 inches wide. For cultivating under low branches seat and pole can be set over with very little side draft resulting. (**Fig. 198**). The extension complete

No. 112, Fig. 197 - \$40.00

Packed weight, 540 lbs.

Complete with extensions, extra seat irons, and includes shield shown in Fig. 198

Works close to the trees without danger to the branches

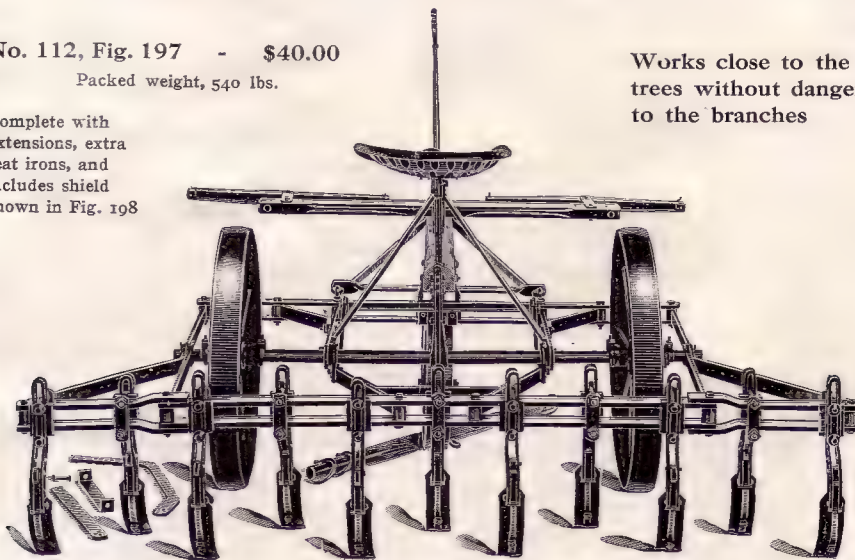


Fig. 197

IRON AGE

Orchard and Variety Cultivator—Continued

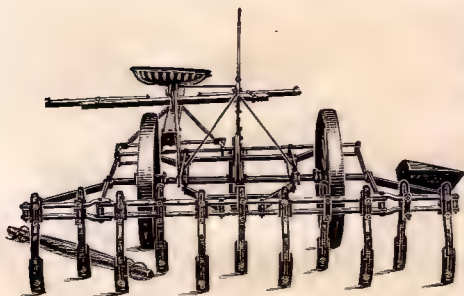


Fig. 198

With extensions, seat set over, and shield to protect trees. Price, extension attachment only, \$8.00

includes four extra teeth and frame extensions to support them, parts for extension of the seat, and steel fender for right hand side to protect trunks of the trees. When wanted with the cultivator, order No. 112. Price, attachment only, \$8.00.

A variety cultivator, also. The standards are adjustable in their positions on the frame, may be reduced or increased in number, take several different styles of teeth—may be used for hilling, fallow work in the open field, as a furrower, and in many other special ways.

Construction. Main wheels are steel, 28 inches with 3-inch tires. Both wheels have an adjustment of 7 inches on the axle—can cultivate row crops at various widths—can set the wheels out when extensions are used, steadying the machine—can adjust for furrows already made—can set the wheels in, as further protection against low branches.

The castor wheels are 14 inches with three-inch tires. They take off all neckweight and help the operator to control working depth. The pole itself is the only weight on the horses' necks.

The frame is made up of heavy steel bars, well braced and will stand severe work. The standards are in two parts—the upper part is in one piece of steel and is held in place on the gang bars by heavy bolts. A $1\frac{3}{4}$ -inch steel axle is used.

A pull on the lever and push with your feet at the same time, raises the gangs easily, even when extensions are used. A heavy coil spring carries the weight in tilting.

No. 110, Fig. 275 - \$32.00

Packed weight, 465 lbs.

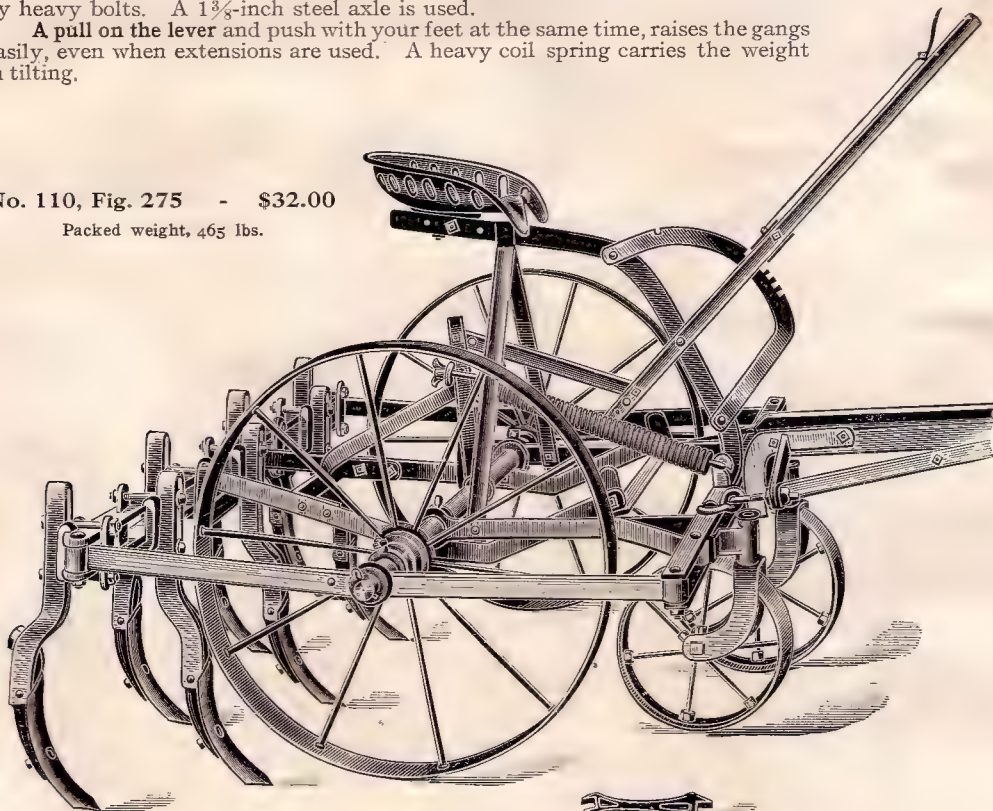


Fig. 275

IRON AGE

No. 47 Two-Row Beet Cultivator

A ONE-HORSE cultivator, built especially for sugar beet growers but easily adapted to a variety of work. Market gardeners use it for cultivating radishes, beets, carrots, etc. Each hoe may be adjusted for width, depth and angle,—a lifting chain carries the gang and it needs but a slight move to follow the rows closely. A pressure spring holds the tools to their work. The regular equipment includes three sweeps and two pairs of side hoes. (See Fig. 124.) When Fig. 211, page 27, or Fig. 212, page 24, are wanted, they can be furnished. The frame is selected oak and wheels are steel with $1\frac{3}{4}$ -inch tires.

Stirring tooth attachment. Fig. 151. In late cultivation of beets, the soil should be stirred deep in the center of the rows. This attachment does the business—the teeth are diamond shaped with a cultivator

Price, Fig. 124 - - - \$18.00

Packed weight, 145 lbs.

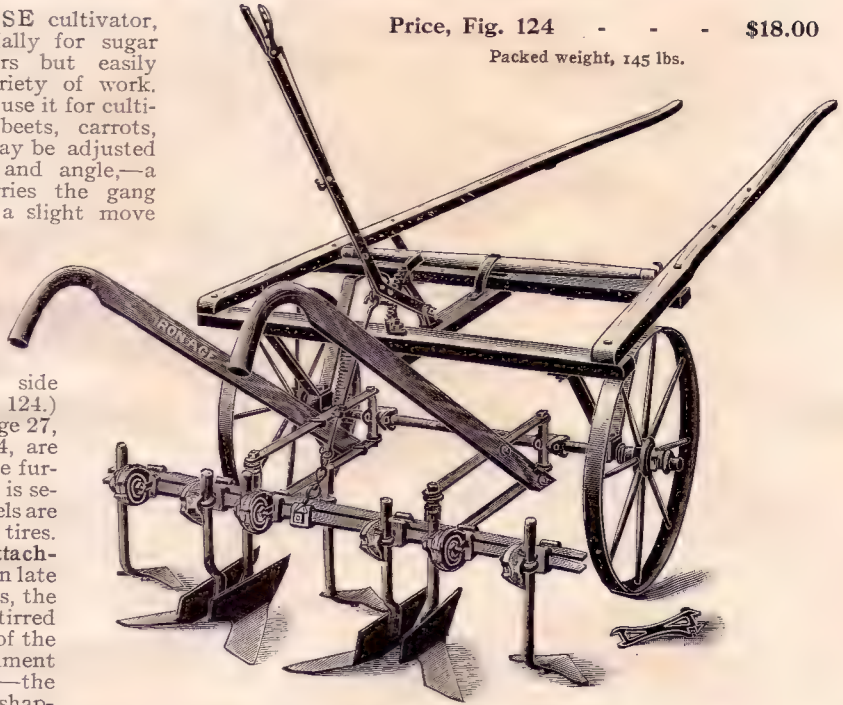


Fig. 124

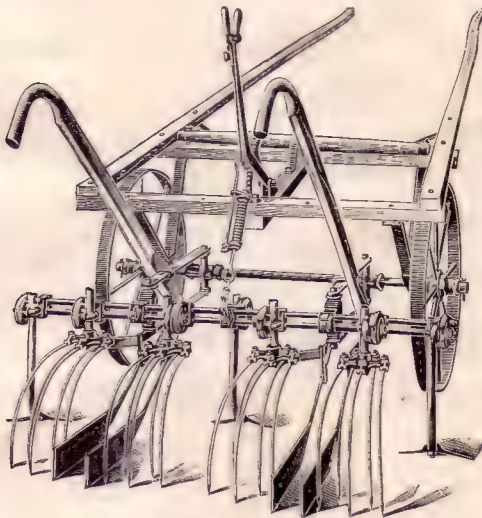


Fig. 175

Price per set, 2 pairs weeders, 2 pairs fenders, \$6.00

point forged on each end—they are set open on the brackets to let trash through. The attachment goes in place of the three sweeps.

Narrow cultivator teeth. Fig. 155. These are also for deeper cultivation and may be used for other work. They replace hoes and sweeps, and are attached in the same manner. If cultivator is wanted equipped with Fig. 155 it will be furnished at the same price but you should order by adding letter "B" to the number, as No. 47B.

Combined weeder and fender. Fig. 175. For the first workings of beets. The teeth stir the soil thoroughly and destroy the weeds—fenders keep the soil from falling on the young plants. Each standard is adjustable in angle, height and depth.

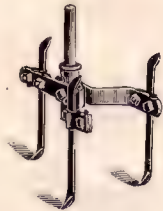


Fig. 154

Price, for three set (9 teeth) \$3.00



Fig. 155

Price, \$.50

IRON AGE

Variety Machine



Fig. 343. As a row maker. Price, \$44.00
Packed weight, 360 lbs.



Marking the next row, opening furrow, distributing fertilizer, sowing peas and covering, all in one operation

THIS tool is all that the name means—the greatest variety of farm work can be done with it—from early spring, through the summer and in the fall, the owner can find use for the machine. It is used as a double moldboard plow—a fertilizer distributor—a coverer—a pea, bean and corn drill—a two-row furrower—two sizes of asparagus ridgers and a side dressing machine.

No. 90 Variety. Fig. 343. Shows the machine at work as a row maker—opening the furrow, distributing fertilizer and covering it, full and free, in a low ridge with a pair of 16-inch discs, also, marking the next row. The cut shows how discs can be raised for turning. Fig. 343 includes a pair of steadying wheels and necessary parts to attach, shown in Fig. 344, page 68. The wheels run just ahead of the discs, on the sides of the furrow and steady the machine for proper covering.

The opening plow is a double moldboard—plows any depth down to eight inches. Fertilizer distributor is practically the same as Fig. 328, page 44, on the planter—capacity 100 lbs. Fertilizer falls in two streams, one each side of the furrow—operator can prevent waste by closing the gate. The wheels are 32 inches, steel, 3-inch tires, with sharp deep flange on the outside—they keep the machine steady and prevent slipping on side hills. They are adjustable on the axle from 36 to 50 inches wide to allow for different width rows.

Seed attachment. Fig. 345 shows No. 90 complete with this attachment—in this form, it opens the furrow, distributes the fertilizer, plants corn, beans or peas and covers in one operation. Is shown in operation at top of this page. The best part of this combination is that, if necessary, you can do all or any part of this work.

The seed attachment is under the seat, close to the ground—seed does not have far to drop. Sows accurately—in drills or drops in hills at 12, 16, 20 or 24 inches apart—the changes are made quickly. This attachment is especially valuable for planting peas or fodder corn. It is practically the same as seed attachment on Iron Age potato planter except that it has a square seed box instead of the round galvanized can. See Fig. 267, page 45. Four plates are furnished for corn and beans, one for peas.

Packed weight,
390 lbs.

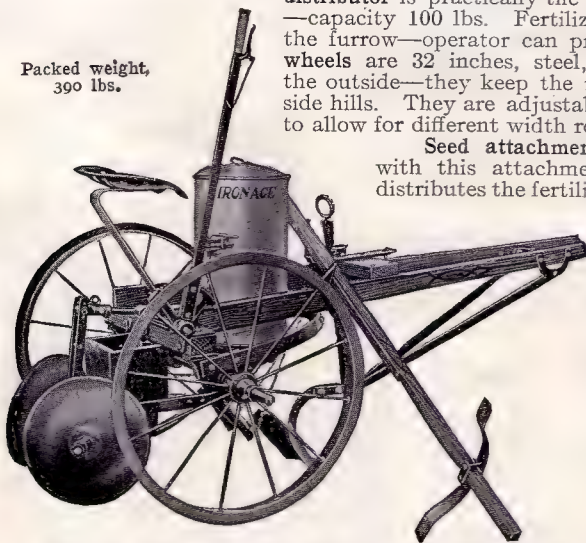


Fig. 345. No. 90, with seed attachment, Price, \$50.50. Complete with Figs. 344 and 346, \$58.00. Packed weight, 450 lbs.

IRON AGE

Variety Machine—Continued

Two-Row Marker attachment. Fig. 346. The solid parts show what is necessary to complete No. 90 for this purpose.

When the machine is wanted as a two-row marker only, it should be ordered as **No. 92 Variety Machine, Fig. 347**, and includes steadying wheels and covering disc frame shown in **Fig. 344**. As shipped regularly, it has five-foot axle. Rows can be marked from $2\frac{1}{2}$ to 5 feet apart, the discs being adjustable on the cross bar every $1\frac{1}{2}$ inches on each side between the limits. When furnished with a six-foot axle, the limits are $2\frac{1}{2}$ to 6 feet. A lever controls depth at which the discs work and also raises entire marker attachment clear of the ground when turning around.

Any man who has used old fashioned markers knows what it is to get off and lift the machine around every time.

When discs are raised, the operator can reach over and easily lift marker pole upright—a spring bolt holds it on the arch, out of the way. (See **Fig. 346**.) The marker pole is usually extended at one and one-half times the width at which the discs are set, the horse walks in the new mark and the rows come just right. The whole marker attachment can be removed by simply drawing three pins and the covering frame with steadying wheels (**Fig. 344**) attached with same three pins—discs and ratchets are taken from mark-

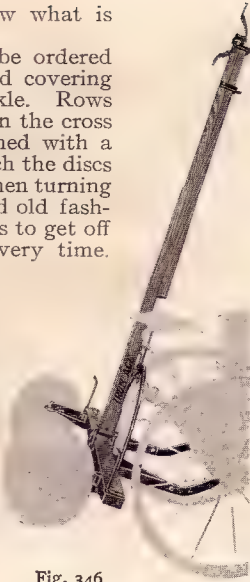


Fig. 346

Solid parts show marker, as attachment only. Price, \$7.50. Raised clear of ground when turning

er and used for covering. The change is easily made in the field.

The No. 92 is used for check-rowing corn land and preparing ground for planting other crops. The flanged steel tires of the wheels prevent slipping on hillsides and straight rows are made, even there.



Fig. 344

Solid parts show steadying wheels included with Fig. 343



Fig. 347. No. 92 row marker, includes solid parts and covering frame in **Fig. 344**. Price, complete, \$27.50. With 6-foot axle, \$28.50. Packed weight, 350 lbs.

Purchasers of this machine have the distinct advantage of being able at any time to add necessary attachments for other work. The machine will outwear many tools—an attachment will take the place of a worn out machine—change in location and conditions, or a new crop to be grown at a profit may show the need of attachments. Then, opening plow, fertilizer distributor, seed, double spreader, or ridging attachments can be bought.

Leveler attachment. Fig. 295, page 46. This is of special advantage in planting peas or leveling a ridge, where fertilizer or manures have been distributed. Price, attachment only, \$1.50.

As a side dresser. Fig. 265, page 46. With double spreader attachment, you can apply quick acting fertilizer at each side of the plants forcing growth to maturity



Fig. 348. As a side dresser

Variety Machine—Continued

and an earlier market, which means readier sales and better prices. A series of holes regulates position of the double spreader in connection with gate of the distributor—when adjusted, the two streams of fertilizer will be evenly divided. The distributor handles perfectly nitrate of soda, which is being used more and more every year. **Price, attachment only, \$1.50.** Fig. 348 shows the machine in operation as a side dresser.

No. 91 as an Asparagus Ridger. Fig. 280 shows this form of the Variety Machine in operation. Ridges asparagus to support and protect the lower part of the stalks so they won't be broken, in cutting season. Repeated cutting and rains wear the ridges down and weeds get thick—these things make ridging important after each cutting. The loose soil is thrown up on the beds by 20-inch discs—they are adjustable for angle, width and depth. Can be used also for ridging celery and for making higher and larger seed beds than with the regular No. 90 Variety Machine. Can be furnished as an attachment only and includes pair of discs with the necessary steel supports and braces. **Price, \$6.00.**

The regular axle on this machine is six feet. If wanted with seven-foot



Fig. 280. No. 91 ridging asparagus. For growers of the green variety. Price, \$29.00, with 7-foot axle, \$30.50. Packed weight, 305 lbs.

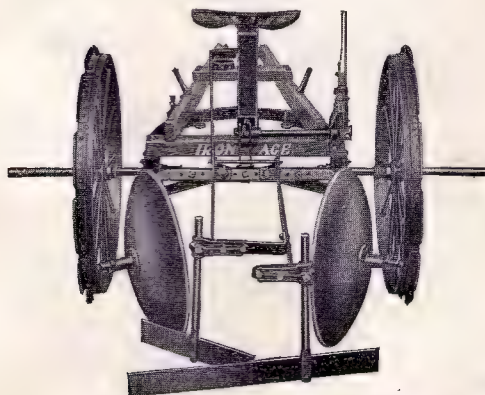


Fig. 302. No. 145 Ridger. For growers of white asparagus. Price, \$40.00. Packed weight, 358 lbs.

lift to prevent breaking off of any grass that has come through. The whole ridger with leveler is raised clear of the ground at end of the rows by movement of one lever. Has easy draft. Most ridgers are built after the plow fashion and are hard on horses.

axle, make price of complete No. 91 machine, \$30.50.

No. 145 Asparagus Ridger. Fig. 302. Built for growers of white asparagus as distinguished from those who do not cover all of the grass by ridging, but cut it green. No. 145 has 36-inch wheels and 24-inch discs—this allows the high ridging which the growers of white asparagus want—also makes a wide crown of supporting soil that practically covers the stalk for bleaching. This ridger can throw a crown that will be 18 inches high and 24 inches wide. The leveler is hung to rear of frame with blades adjustable both as to height and angle, and the whole leveler attachment is provided with a foot



No. 145 Ridger with Leveler

IRON AGE

Barrel Truck, Cart, Leaf Rack, Etc.

- No. 1. Without Barrel, Steel Wheels, 1½ in. . . . \$7.00
- No. 2. Without Barrel, Steel Wheels, 2½ in. . . . 7.75
- No. 3. Without Barrel, Steel Wheels, 3½ in. . . . 8.50
- No. 1 W. Without Barrel, Wood Wheels, 1½ in.. . . 8.25
- No. 2 W. Without Barrel, Wood Wheels, 2½ in. . . . 9.25
- No. 3 W. Without Barrel, Wood Wheels, 4 in. . . . 10.75

Prices include one pair Trunnions.
With Barrel, add \$3.00

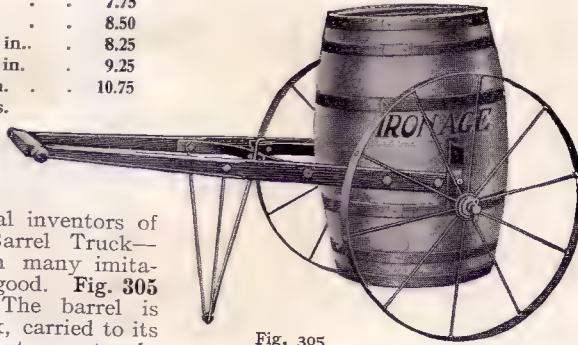


Fig. 305



Fig. 350
Barrel Stay
Price, \$.50

WE are the original inventors of this style of Barrel Truck—there have been many imitations but none quite as good. Fig. 305 shows construction. The barrel is picked up by the truck, carried to its place and dropped without your touching it. The weight is balanced on the axle—none of it is carried on the handles—you just have to push the truck along. There are no castings to break—steel braced and steel fitted throughout. The width of the truck is 39½ inches (outside). It has steel wheels with 2½ inch tires unless otherwise ordered. We can furnish with 1½ inch or 3½ inch steel, or 1½, 2½ or 4 inch wood wheels. The barrel is well made. The truck will handle other barrels,—spirit or oil barrels for instance—if extra trunnions (price per pair, \$.40) are used.

Fig. 350. The solid part shows barrel stay rod attachment. It keeps barrel from tipping and contents splashing, when truck is in motion. Is furnished only when ordered. Will fit old trucks. When wanted with truck, add letter "S" to the number, as No. 2S.



Fig. 308

Solid part shows sprinkler attachment
Price, \$3.50

Fig. 351. The solid part shows part of combination side irons and truss rod. This attachment is to keep wheels from spreading at top after long continued carrying of heavy loads. It is to guard against rough usage only but does add strength to truck. Is furnished as an attachment. If wanted with truck, add letter "T" to the number, as No. 2T. Add \$1.00 to above prices.

Fig. 308. The Sprinkler attachment shown is used for watering lawns and walks, a great convenience for home, parks, railroad stations, cemeteries, etc. It consists of perforated steel pipe and fittings. A ball valve on the right side controls the water.

Fig. 307. Leaf Rack. For taking care of leaves, grass and trash on the lawn, in the garden and may be used handily about the barn when you are cleaning up. Shipped knocked down, and can be folded flat and put away in small space. Arrows show tail board fittings, trunnions and spring catch to hold it at the back. Size, 42 x 28 x 21 inches deep. Is light weight but well put together. Requires no bolts to attach—simply lay it on the truck.

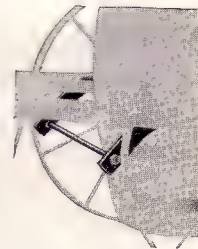


Fig. 351

Solid part shows portion
of side irons and truss
Price, attachment
only, \$3.50

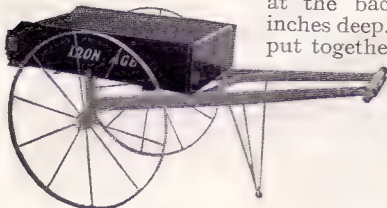


Fig. 306
Price, box only, \$3.25

Fig. 306. Hand Cart Box. Size 37 x 23½ x 8 inches deep. Includes trunnions and spring catch. Attaches in same way as the leaf rack. Tail board lifts out in the usual way.



Fig. 307

Arrows show spring catch, trunnions, tail
board connections. Price, leaf
rack only, \$5.50

IRON AGE

Small Tools for Farm and Garden

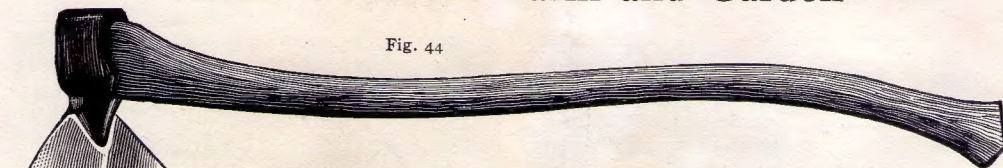


Fig. 44

- No. 1, 5½ in. - \$11.50 doz.
No. 2, 6½ in. - 12.50 doz.
No. 3, 8 in - 13.50 doz.

"BATEMAN" HOE. Fig. 44. A grubbing or digging hoe—for cutting corn stubble, trimming along the fences, digging out roots, digging potatoes in the garden, etc. Is light but strong, has beveled edges and is oil tempered. Every farm should have one.



Transplanting Hoe. Fig. 41. For transplanting long stem tomato plants and others. Jab the hoe into the soil, pull it toward you, lay the plant against the slanting side and push the dirt tight around the roots.

Vine Cutter. Fig. 43. For cutting sweet potato vines, etc. Saves the back.

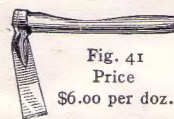


Fig. 41
Price

\$6.00 per doz.



Fig. 43. Price, \$6.00 per doz.

"Bateman" Hand Garden Plow. Fig. 39. For opening furrows for seed and manure, for



Fig. 168. Price, \$3.50 per doz.

covering and for tending the crop. Is a neat, carefully made tool with highly polished steel mold-board and side handle

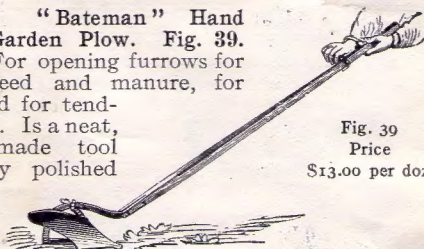


Fig. 39
Price

\$13.00 per doz.

(don't have to pull overhand). A thumb nut adjusts the working depth. The most manageable tool of the kind on the market.

Dandelion Puller. Fig. 168. A handy tool with which to keep your lawn cleaned up.



Fig. 42
Price
\$4.25 per doz.

Eureka Corn Knife. Fig. 42. A corn cutter made from a solid piece of steel, oil hardened and temper drawn in a hot lead bath. Has wood handle. You will not be without one or more of these tools when you have used one an hour. See if we are not right.



Fig. 128
Garden
Dibble
Price, \$3.25
per doz.

No. 2 Asparagus Knife. Fig. 260. Some prefer to use a concave knife—they think it takes hold better. Such a tool is a necessity for large or small growers—the crop will be gathered in better shape, and time saved is just as good as money in the bank.



No. 2
Fig. 260. Price, \$4.00 per doz.

No. 1 Asparagus Knife. Fig. 45. For those who want the flat kind. **Transplanting Trowel. Fig. 40.** For small plants. Used by truckers in sweet potatoes, cabbage, cauliflower, etc. One piece of steel with wood handle. Don't forget that to properly transplant, the holes should all be the same depth, and the plants supported against a slanting side of the hole. Then close up the soil around the roots.



No. 1
Fig. 45. Price, \$3.00 per doz.



Fig. 40
Price, \$3.75
per doz.

IRON AGE

Horticultural Row Index

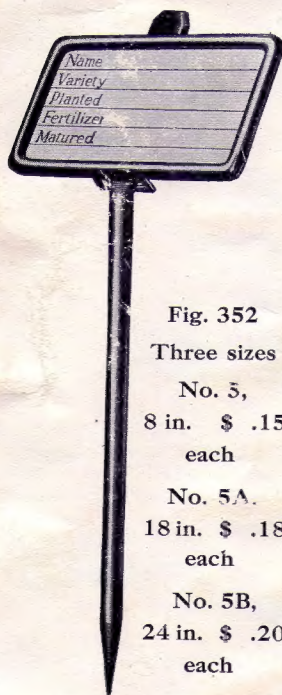
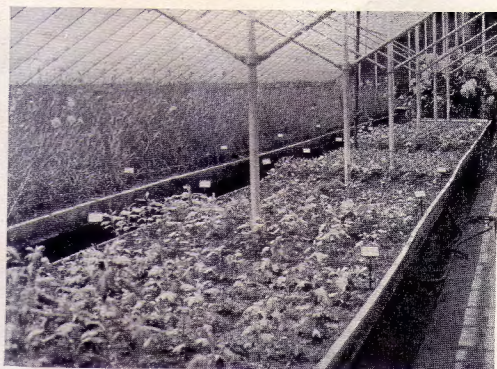


Fig. 352

Three sizes

- No. 5,
8 in. \$.15
each
- No. 5A,
18 in. \$.18
each
- No. 5B,
24 in. \$.20
each

FOR use in private gardens, on trial grounds, experimental plots, in greenhouses, parks, etc. Shows what you planted, and where and when. The labels can be taken out and filed for future reference. They are protected against the weather, dirt, etc., by transparent celluloid sheets. The label holder and frame are stamped from two pieces of steel and the flat end of the steel standard goes through a double slit in holder on the back to keep label in the frame. Holder and frame are japanned to prevent rust. The card label is a printed form, size $2\frac{5}{8}$ by $1\frac{1}{4}$ inches. Extra labels furnished when needed. The standards are made in three lengths as shown in list above. Home gardeners, seed men and professional horticulturists find such an index of great value and convenience in their business.

Harness Brackets

Every farmer, every livery, every private stable should have a set of these brackets. They will keep your harness in shape, which won't be the case if you hang the parts on old-fashioned hooks or nails, or throw it in the corner—somewhere. These brackets will teach your men and boys order—that there is "a place for everything" and every thing should be in its place. Instead of one hook from which

you have to pick each separate part of your harness, you will have these four brackets. If one part is missing, you can see it at a glance and know which part it is.

The brackets are made of gray iron, painted black and furnished with the necessary screws for fastening. The four parts are for Saddle, Collar, Crupper, and Bridle.

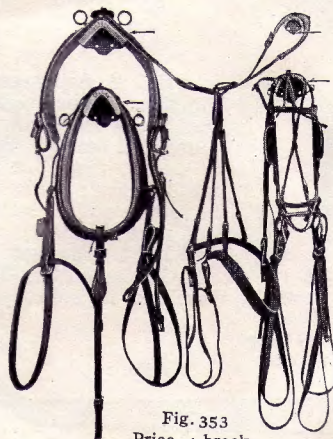
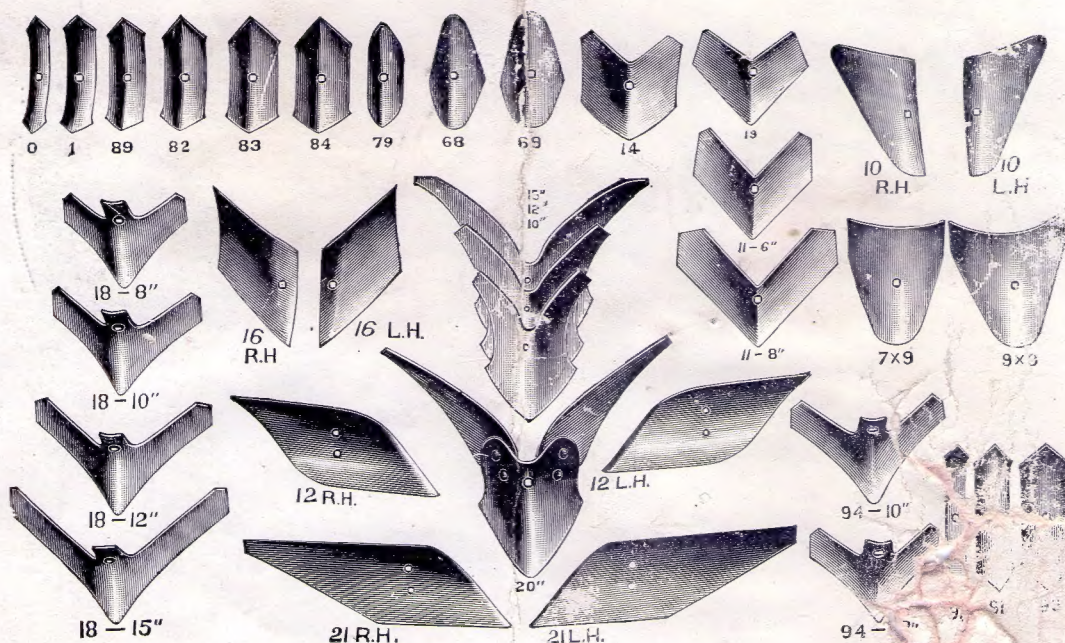


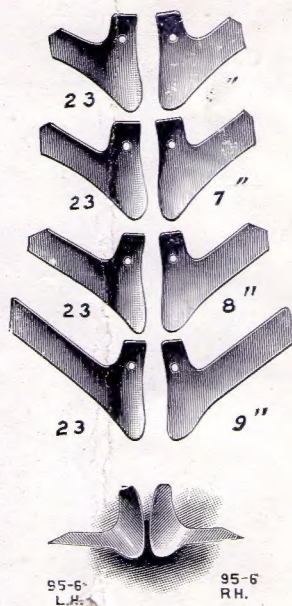
Fig. 353
Price, 4 brackets, \$1.00

IRON AGE

Cultivator Points and Steels



No.	0, 1 1/4 inches	.....	\$0.10
"	96, 1 1/2 "	(no cut)	.10
"	1, 2 "	.....	.10
"	89, 2 1/2 "	.....	.10
"	82, 3 "	.....	.11
"	83, 3 1/2 "	.....	.13
"	84, 4 "	.....	.14
"	79, 2 1/2 "	.....	.12
"	68, 4 "	.....	.12
"	69, 4 1/2 "	.....	.14
"	10, R. or L.	.....	.25
"	11, 6 inches	.....	.25
"	11, 8 "	.....	.30
"	12, R. or L.	.....	.30
"	14, 7 inches	.....	.25
"	16, R. or L.	.....	.25
"	18, 8 inches	.....	.28
"	18, 10 "	.....	.32
"	18, 12 "	.....	.38
"	18, 15 "	.....	.45
"	19, .....	.....	.30
"	21, R. or L.	.....	.50
"	23, 6 inches, R. or L.	.....	.26



No.	23, 7 inches, R. or L.	.....	\$0.30
"	23, 8 "	.....	.5
"	23, 9 "	.....	.0
	10-inch Furrower	.....	.60
	12 " " "	.....	.0
	15 " " "	.....	1.4
	20 " Imp. " (no cut)	.....	2.00
	Reversible point and bolt for above (no cut)	.....	.25
	20-inch Furrower, Adj. Wings	.....	1.75
	Shovel Blade, 7x9	.....	.40
	" " 9x9	.....	.50

For Riding Cultivators Only

No.	90, 1 1/4 inches	.....	\$0.18
"	91, 2 1/2 "	.....	.20
"	93, 3 1/2 "	.....	.22
"	94, 8-inch Sweep	.....	.28
"	94, 10 " " "	.....	.32
"	95, 6 " Side Hoes, R. or L.	.....	.50

IRON AGE

FARM AND GARDEN IMPLEMENTS

N. D. WELSH
Cortland, N. Y.



PROPERTY OF IRON AGE